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ABSTRACT

An evaluation made by outside experts was conducted to measure the effectiveness of the nine revised cluster units in Project AWAKE, to investigate the program's progress towards its stated objectives, and to evaluate the methodology employed. Career awareness of students was compared and evaluated through separate tests. Scenes depicting work and nonwork activities were shown to students in K-4, and a career awareness inventory was administered to students in grades 5 and 6. Teacher and administrator attitudes toward the experimental methodology were evaluated through questionnaires and interviews. Participants included an experimental group of 120 students who received instruction in the revised career education units, 120 students who attended schools which utilized career education units but did not receive instruction, and 120 students who attended schools that did not utilize career education units. An analysis of the collected data is presented. It revealed that the experimental class did better than the two control groups in the K-2, 3-4, and 5-6 grade levels. Two-thirds of the document (76 pages) contains appended materials which were used for the evaluation process: the career awareness inventory; administrator, developer, and user questionnaires; grade level concept questions; and related items. (Author/EC)

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# THIRD PARTY EVALUATION REPORT OF A COMPREHENSIVE CAREER EDUCATION PROJECT FOR THE CONTINUATION, EXPANSION AND DIFFUSION OF (A MODEL CAREER ORIENTED CURRICULUM BY INDIVIDUALIZING THROUGH TECHNOLOGY)

Project Number 29-3005

The Northwest Tri-County Intermediate Unit
c/o 752 Garden Street
Meadville, Pennsylvania #16335

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# THIRD PARTY EVALUATION REPORT

OF

# A COMPREHENSIVE CAREER EDUCATION PROJECT FOR THE CONTINUATION, EXPANSION AND DIFFUSION OF (A MODEL CAREER ORIENTED CURRICULUM BY INDIVIDUALIZING THROUGH TECHNOLOGY)

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# PROJECT AWAKE

# 1973-74

# Evaluation

## Measuring ....

## Testing ...

## Recommending ...

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July 1974

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# EVALUATION PLAN

## Overview

The evaluation plan is basically one of measuring the effectiveness of the nine revised cluster units in Project AWAKE. The main thrust of the evaluation will address itself to measuring the program's progression toward the stated objectives of the project. Inasmuch as activities and methodology in the project are crucial teacher and pupil components, an evaluation using expert opinion by individuals outside the program will be undertaken. This aspect of the evaluation will be preferential in nature.

Career awareness (content defined as career concepts) of pupils in all grade levels, K-6, will be evaluated. Separate tests will be designed for the various cluster units used by pupils in Kindergarten through grade 4.

In grades 5 and 6 the Career Awareness Inventory developed by the Cornell Institute for Research and Development in Occupational Education will be administered to all pupils for comparison with national norms. Teacher and administrator attitudes and opinions will be evaluated through the use of questionnaires, opinionaires and interviews.

Comparability of pupils in the project with pupils not participating in the project will be undertaken. This will be achieved through the use of the time-in-space mode of measurement. An assumption is made that the control groups are not as aware of the world of work as the experimental

group; therefore, no pre-test is necessary. Thus evidence toward stated objectives can be ascertained. This assumption is based on the premise that the objectives of Project AWAKE are valid, inasmuch as they were accepted as the basis for funding the project.

The development of a positive self-concept is a major goal of the project. Insights into achievement of this objective can be gleaned through expert opinion, analysis of teacher attitude, and appropriateness of materials as indicated by student responses.

Focus

The evaluation concerns itself with the following:

I. Progress toward the stated objectives.
   A. Integrate career and self-awareness with the basic academic materials of the K-6 grade levels.
   B. Expose each student to a range of career clusters within the context of his maturity level.
   C. Individualize the learning programs for each student to meet his interests and concerns.
   D. Demonstrate the feasibility of using existing computer facilities for storage and retrieval of career oriented curricula.

II. Progress toward grade level concepts in the nine revised cluster units.

III. An evaluation of the revised methodology employed to meet these objectives and concepts.

IV. Progress toward the development of a positive self-concept of the students in the project.

PROGRESS TOWARD STATED OBJECTIVES

The Population

1. All students in the project
2. All teachers in the project
3. All principals and supervisors involved in the project

The Design

A systems approach will be used to measure progress. Questionnaires and opinionaires will be administered to teachers and administrators. Additional evaluation instruments will include individual and group tests, standardized tests, interviews and observations.

Items and statistical analyses will be made of the tests employed in the study as related to the project objectives. Further analyses of the nine revised cluster units will be made by a panel of experts. Quantitative data will be evaluated for each objective.

PROGRESS TOWARD GRADE LEVEL CONCEPTS QUESTIONS IN THE REVISED CLUSTER UNITS

The Population

1. Experimental Group - 120 students will represent the experimental group. Random and cluster sampling will be employed in the selection process. The 120 students will be divided as follows:

| | |
|---|---|
| K-2 | 40 students |
| 3-4 | 40 students |
| 5-6 | 40 students |

2. Control Group A - 120 students who attend school where the project is in existence but who are not in the project compose the first control group. Selection procedures and structuring are indentical to these of the experimental group.
3. Control Group B - 120 students who are in a school where the project is not in existence will be selected and structured by procedures identical to those of the experimental group to compose the second control group. This school (schools) will represent a socio-economic, geographical and educational setting similar to the schools involved in the project.

Design

Two basic evaluation instruments will be employed. The first will be used with pupils in grades K-4. The second will be used with the fifth and sixth grade students.

Grades K-4 Instrument

A series of scenes depicting work and non-work activities will be shown to the students individually. The instrument will measure the awareness of the student's career concepts as related to the nine cluster units in the project at each designated grade level. The administering of the instrument will take place when the instructional portion of the project units is completed. Testing will take place at all grade levels for experimental and control groups at approximately the same time.

Grades 5-6 Instrument

The Career Awareness Inventory of the Cornell Institute for Research and Development in Occupational Education will be utilized at the fifth and sixth grade levels.

## THE REVISED METHODOLOGY EMPLOYED TO MEET THE OBJECTIVES AND CONCEPTS

### The Population

1. All teachers in the project.
2. All students in the project.
3. Principals and supervisors of schools in the project.
4. Panel of experts.

### The Design

Questionnaires and opinionaires will be used to obtain information concerning the experimental methodology. Emphasis will be placed on ascertaining if the experimental methodology and activities are considered more effective for children than more traditional methods.

A panel of experts will evaluate each of the nine cluster units in regard to experimental methodology, feasibility and appropriateness at each grade level.

## PROGRESS TOWARD THE DEVELOPMENT OF A POSITIVE SELF-CONCEPT OF STUDENTS IN THE PROJECT

### The Population

1. All teachers in the project.
2. All students in the project.
3. Panel of experts.

An estimate of the development of a positive self-concept of pupils will be made through observation, expert opinion of methodology employed, student opinion and reaction to the materials as observed by the evaluation team.

Treatment of Data

The results will be used to ascertain the following:

1. Progress in relation to the objectives.
2. Comparison of experimental and control group results by grade level as to their awareness to the concept questions.
3. An assessment of the project's influence on the self-concept of students.
4. The development of career [illegible] as a student progresses through the elementary school.

## EVALUATION OF PROGRESS TOWARD OBJECTIVES

### Development Of Instrument

An evaluative instrument was developed by the evaluators to measure the awareness of the student's career concepts as related to the nine revised cluster units in the project.

This instrument consisted of 63 (sixty-three) scenes depicting work and non-work activities for the grade levels Kindergarten through Grade 4. In grades 5 and 6 the Career Awareness Inventory of the Cornell Institute for Research and Development in Occupational Education was utilized.

### Field Testing Procedure

Separate tests were administered to different grade levels as follows, including the number of possible correct responses.

| Grade Level | Possible Score |
|---|---|
| K | 23 |
| 1-2 | 25 |
| 3-4 | 26 |
| 5-6 | 125 |

In each of the tests of the instrument, grade level concept questions were the basis of selecting the scenes, devising the questions, and scoring. Each scene consisted of an 8" X 10" picture.

All tests administered to students from Kindergarten through Grade 4 were given individually by the evaluators in the school in which a child attended. The fifth and sixth grade instrument was administered by the classroom teacher in class-size situations.

Miniature copies of the scenes used in the instrument are found in Appendix A. Actual questions and procedures used in the individual testing are included.

The Career Awareness Inventory can be found in Appendix B.

## SUMMARY OF EVALUATION

### Part I. Field Testing Of Students

In an effort to assess the impact of Project AWAKE on those students exposed to the nine revised career education units available, an experimental design was employed. An experimental group was identified along with two control groups. Students comprising all groups were from schools and classrooms randomly chosen that represented grades kindergarten through six.

The experimental group ($E_1$) consisted of students who received instruction in the revised career education units presently developed. All experimental students were thus exposed to one or more units of work involving the career education concepts.

The first control group ($C_2$) was composed of students in schools that utilized career education units but were not exposed to any formal instruction with the units. This group was identified to determine, if any, "spin-off" was occurring within a school where the units were taught.

The other control group ($C_3$) consisted of students in schools where career education units were not employed. Thus, all of these students had no exposure to instruction, either direct or indirect, to the nine revised career education units.

### Instruments Used In Evaluation Career Education Units

Two basic instruments were employed in the evaluation. The first was an individual test designed by the evaluators. This test consisted of three levels, Kindergarten, First and Second Grades, and Third and Fourth Grades.

The second instrument, The Career Awareness Inventory, was utilized at the fifth and sixth grade levels.

For the purpose of statistical analyses, students in the various grades were grouped as shown in Table I.

TABLE I

Class Groupings and Numbers Within Groups

| Grade Grouping | $E_1$ | $C_2$ | $C_3$ |
|---|---|---|---|
| K-2 | 40 | 40 | 40 |
| 3-4 | 40 | 40 | 40 |
| 5-6 | 40 | 40 | 40 |

All groups contained forty students except the experimental fifth and sixth grade groups, which numbered thirty-eight students. This difference resulted from the fact that the evaluators were unable to secure additional students due to the lateness in the school year, absenteeism, and the beginning of summer vacation at the schools concerned. The thirty-eight students were all the students attendance in two classes in the two experimental schools (fifth and sixth graders) at the time the evaluation was completed.

Table II contains the mean scores of the three groups for the grade level groupings analyzed. As can be seen in Table II, the experimental groups for each grade grouping attained higher scores than the two control groups.

TABLE II

Mean Test Scores

| Grade Grouping | $E_1$ | $C_2$ | $C_3$ |
|---|---|---|---|
| K-2 | 16.65 | 13.30 | 13.60 |
| 3-4 | 18.10 | 16.30 | 15.30 |
| 5-6 | 100.60 | 94.00 | 89.50 |

Table III illustrates the variance for each of the groups by grade groupings. The results contained in Table III reveal that the individual scores within the groups are distributed similarily around their respective mean scores.

TABLE III

Variances

| Grade Grouping | $E_1$ | $C_2$ | $C_3$ |
|---|---|---|---|
| K-2 | 10.90 | 11.50 | 10.80 |
| 3-4 | 10.40 | 11.10 | 9.80 |
| 5-6 | 169.38 | 132.66 | 120.15 |

In order to determine if the mean differences revealed in Table II were significant, a one-way analysis of variance was employed to compare each of the three grade level groupings evaluated. The results of these tests are presented in Tables IV, V, and VI.

TABLE IV

ANOVA Summary Table --- Kindergarten, First, and Second Grades

| Source | D.F. | SS | MS | F |
|---|---|---|---|---|
| Among | 2 | 264.01 | 132.01 | 11.88 |
| Within | 117 | 1299.58 | 11.11 | |
| Total | 119 | 1563.59 | | |

Table IV contains the data of the K-2 differences. This table reveals a calculated F value of 11.88 with 2 and 117 degrees of freedom. Since this value exceeds the tabled value of 3.09 for 2 and 117 degrees of freedom, the differences identified are considered significant at the .05 level of confidence.

TABLE V

ANOVA Summary Table --- Third and Fourth Grade

| Source | D.F. | SS | MS | F |
|---|---|---|---|---|
| Among | 2 | 166.20 | 83.10 | 7.93 |
| Within | 117 | 1225.93 | 10.48 | |
| Total | 119 | 1392.13 | | |

Table V contains the summary of the data comparing differences among the three third and fourth grade groups. The calculated F value of 7.93 exceeds the tabled F value of 3.09 for 2 and 117 degrees of freedom. As

a result, the differences among the third and fourth grade groups are considered significant at the .05 level of confidence.

TABLE VI

ANOVA Summary Table --- Fifth and Sixth Grades

| Source | D.F. | SS | MS | F |
|---|---|---|---|---|
| Among | 2 | 2415.00 | 1207.50 | 8.61 |
| Within | 115 | 16128.00 | 140.24 | |
| Total | 117 | 18543.00 | | |

Table VI shows the results of the analysis of variance in comparing the three groups at the fifth and sixth grade. The calculated F value of 8.61 exceeds the tabled value of 3.09 for 2 and 115 degrees of freedom. These differences are thus considered to be significant at the .05 level of confidence.

The conclusions drawn from these tests reveal that in all three grade groupings the experimental classes did significantly better than the two control groups on the tests administered. No "spin-off" effect could be identified for the first control group ($C_2$). Thus it appears that the direct instruction of children with the nine revised career education units increase a student's awareness concerning career orientation and the world of work as compared to the students not receiving such instruction.

Part 2. Project AWAKE Developer Questionnaire

An analysis of the responses to the Developer Questionnaire indicated that teachers reacted favorably to all questions concerning the project. Questions one through nineteen solicited responses on a five-point scale from "Strong Agreement to Strong Disagreement." The vast majority of the responses were in the categories of "Strong Agreement" and "Mild Agreement."

Questions twenty through twenty-seven were "Yes-No" questions and a majority of the developers indicated "Yes" to every question. These responses indicate a positive attitude toward the project objectives, classroom procedures, and content of career education.

Question twenty-eight was a question that asked respondents to evaluate the helpfulness of seven activities in developing the units. These responses indicate that all activities were helpful in developing the units for instruction.

A statistical summary of the results of this questionnaire can be found on pages 15-17.

The written comments of the developers were generally favorable in nature. Many comments indicated that teachers are utilizing methodology, learning a further awareness of individual needs of pupils and the desirability of developing the individuality of students from their experiences in the project. These responses further indicate that progress toward the self-concept of each child can be enhanced through career education.

All responses made by developers to the questionnaire can be found in Appendix C.

Summary Statistics For Developer Questionnaire

| No. | Question | Strong Agreement | Mild Agreement | Neutral | Mild Disagreement | Strong Disagreement |
|---|---|---|---|---|---|---|
| 1. | The topic of the unit which I helped develop was significant to me. | 11 | 8 | 0 | 1 | 0 |
| 2. | The topic of the unit which I helped develop is relevant to career education. | 19 | 1 | 0 | 0 | 0 |
| 3. | I was given sufficient information about the project prior to the workshop. | 7 | 8 | 1 | 3 | 0 |
| 4. | I was given ample opportunity to define the scope and focus of the individualized unit. | 4 | 10 | 2 | 3 | 0 |
| 5. | There was an atmosphere of mutual respect and cooperation between myself and other participants. | 15 | 3 | 0 | 1 | 1 |
| 6. | There was an atmosphere of mutual respect and cooperation between myself, the project staff, and the consultants. | 19 | 5 | 1 | 0 | 0 |
| 7. | There were available, most of the human and material resources I felt necessary for developing the unit. | 1 | 15 | 2 | 1 | 1 |
| 8. | Once I had made some decision, it was easily implemented. | 3 | 12 | 5 | 0 | 0 |
| 9. | There was an opportunity to test ideas regarding the unit in real situations or obtain factual information concerning their worth of effectiveness. | 4 | 8 | 3 | 1 | 1 |
| 10. | Progress was continually assessed by all participants throughout the program. | 6 | 10 | 4 | 0 | 0 |

| No. | Question | Strong Agree-ment | Mild Agree-ment | Neutral | Mild Disag-reement | Strong Disag-reement |
|---|---|---|---|---|---|---|
| 11. | Individual differences among the participants were accepted by all. | 13 | 7 | 0 | 0 | 0 |
| 12. | There was adequate coordination among those working on a single cluster. | 11 | 8 | 1 | 0 | 0 |
| 13. | There was adequate coordination among the various groups working on different units. | 7 | 8 | 3 | 2 | 0 |
| 14. | Sufficient attention was paid to group problems. | 9 | 10 | 0 | 1 | 0 |
| 15. | Sufficient attention was paid to individual problems in the group. | 5 | 11 | 1 | 2 | 0 |
| 16. | I felt my activities were significant and meaningful to the project. | 8 | 10 | 2 | 0 | 0 |
| 17. | The philosophy and concepts of career education were taken into consideration in the develop-ment of the cluster resource unit. | 13 | 5 | 1 | 0 | 0 |
| 18. | The make-up of our group was sufficiently diverse to provide and adequate cross-section of opinion and expertise. | 12 | 5 | 0 | 2 | 0 |
| 19. | To what degree did you develop the unit around the concept of meeting individual student needs and interests? | 4 | 9 | 0 | 0 | 0 |
| | | | | | Yes | No |
| 20. | As a result of your experiences in Project AWAKE, are you more aware of problems in education as they relate to career education, specifically your own school and classroom due to your participation in the workshop? | | | | 15 | 1 |

| | | Yes | No |
|---|---|---|---|
| 21. | As a result of your experiences in Project AWAKE, do you possess different ideas, persuasions, and viewpoints about education as they relate to career education? | 16 | 2 |
| 22. | As a result of your experiences in Project AWAKE, do you anticipate your relationship with your students will change? | 11 | 8 |
| 23. | As a result of your experiences in Project AWAKE, do you anticipate your classroom procedures will change? | 12 | 6 |
| 24. | As a result of your experiences in Project AWAKE, do you feel increased respect for the opinion of others regarding solutions to educational problems as they relate to career education? | 13 | 4 |
| 25. | As a result of your experiences in Project AWAKE, are you more willing to work with others to solve instructional problems? | 14 | 3 |
| 26. | As a result of your experiences in Project AWAKE, are you more able to evaluate certain educational practices of your school? | 14 | 3 |
| 27. | In building the AWAKE resource unit, was concern given for individual pupil growth and development patterns? | 19 | 1 |

28. Please evaluate the following list of activities as to the degree of helpfulness in developing the units. Check the appropriate space.

| | None | Some | Much | No Response |
|---|---|---|---|---|
| Group conferences | 0 | 11 | 8 | 0 |
| Individual conferences | 0 | 10 | 10 | 0 |
| Visitations to resources | 1 | 6 | 11 | 0 |
| Reading professional books and teaching materials | 2 | 14 | 3 | 0 |
| Demonstrations | 1 | 11 | 5 | 3 |
| Examining teaching materials | 1 | 9 | 8 | 1 |
| Consultant help | 0 | 9 | 10 | 1 |

Part 3. Project AWAKE User Questionnaire

Responses to the User Questionnaire indicated that teachers react favorably to the materials, methodology, and content of the nine revised units. There was widespread agreement on the majority of the questions asked of users of the project. No concensus of agreement was reached on questions 7 and 15.

A summary of the results of this questionnaire can be found on pages 19 and 20, titled, "Statistics for User Questionnaire."

The written comments of users were in general favorable; however, many teachers indicated that they wanted more specific activities and materials for their students to use in learning situations. In the judgment of the evaluators, this criticism is normal and natural after a revision of materials for instruction.

All responses made by users to the questionnaire can be found in Appendix D.

Part 4. Administrator Responses to Project AWAKE Questionnaire

An analysis of responses indicated that administrators in general feel that they are informed as to the format and progress of Project AWAKE in their respective schools. (However, some comments indicate that the Project Director should endeavor to keep chief administrative officers informed on a yearly basis).

The administrators responded, that in their judgment, children react to the materials and methodology of the project favorably. Also, the methodology germane to the project is compatible with teaching techniques

Summary Statistics for User Questionnaire

| No. | Question | Yes | No |
|---|---|---|---|
| 1. | In your opinion was this unit oriented toward career awareness for the elementary student? | 19 | 0 |
| 2. | Did you experience difficulty in obtaining the materials or measuring devices listed in the unit? | 5 | 15 |
| 3. | Were the instructional activities restricted by the physical facilities of the school? | 3 | 16 |
| 4. | Do you feel that by using this guide, you could more effectively utilize state syllabi or local courses of study? | 16 | 2 |
| 5. | Had you taught this topic previously without benefit of the guide? | 6 | 13 |
| 6. | If you had taught the same unit previously, did the past experience lessen your use of the guide? | 4 | 11 |
| 7. | In your printout for individual students, were the number of suggestions relating to content, activities, materials, and measuring devices sufficient? | 9 | 10 |
| 8. | Would you consider a laboratory, demonstrating class, or other in-service training of value in helping you learn how to implement units? | 12 | 7 |
| 9. | Is the instructional staff at your school adequate for the effective utilization of the guide? | 16 | 3 |
| 10. | Were you given sufficient information and guidance prior to using and during the use of the units? | 19 | 0 |
| 11. | As a result of using the guide, have you subsequently used other resources more extensively? | 16 | 3 |
| 12. | Do you possess different ideas, persuasions, and viewpoints about education and its processes since your experience with the guide? | 14 | 5 |
| 13. | Are you more aware of problems in education and career education specifically in your own school and classroom as a result of using the guide? | 16 | 3 |

| No. | Question | Yes | No |
|---|---|---|---|
| 14. | Has the use of the materials in Project AWAKE changed the teacher-pupil relationships in your classroom? | 12 | 6 |
| 15. | Has the use of the guide influenced your classroom procedures? | 9 | 7 |
| 16. | Are you planning to use this unit again? | 16 | 1 |
| 17. | Would you like to use other units? | 18 | 0 |
| 18. | Would you like to work as part of a team in developing a unit? | 13 | 4 |
| 19. | Do you feel that you have adequately been informed as to the format and methodology of Project AWAKE as it is to be used in your classroom? | 17 | 2 |

used in their schools.

Suggestions for improvement in the project concerned itself with the acquisition of materials from the central distribution center, bulkiness of printouts, and teacher instructions for individuals not involved in writing the programs.

A listing of responses to this questionnaire can be found in Appendix E.

Part 4. Panel of Experts.

A panel of experts was utilized to rate the nine revised units in Project AWAKE. These experts consisted of four professional educators who have high esteem among their collegues in the judgment of the evaluators. Two of the individuals are principals of elementary schools, one a classroom teacher, and the other a college professor in charge of Early Childhood Education. A summary of their qualifications can be found in Appendix G.

The panel members were instructed to sample each of the nine units. Further, each of the panel members was asked to rate each of the nine revised units from the viewpoint of what she (he) knew of good elementary teaching practices and curriculum. More specifically, the panel members were asked to complete two ratings of each unit as follows.

First Rating

Rating of the project as an experimental program. The panel considered the following criteria for this rating:

A. Over-all objectives of the program.

B. Grade level questions.

C. Specific objectives of units.

D. Subject matter content.

E. Activities and resourses.

Each member rated the units of a scale from 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, with 10 being the highest.

The mean rating of each of each of the nine units by the panel can be found in Table VII, titled, "Rank Order Rating Of The Nine Revised Units In Project AWAKE As An Experimental Program."

Table VII

Rank Order Rating Of The Nine Revised Units In Project AWAKE
As An Experimental Program
(10-highest ---- 1-lowest)

| | | |
|---|---|---|
| 1 | Public Service | 9.00 |
| 2 | Transportation | 8.50 |
| 3 | Agri-Business/Nat. Resources | 8.25 |
| 4 | Health | 8.00 |
| (6) | Communications | 7.75 |
| (6) | Business and Office | 7.75 |
| (6) | Manufacturing | 7.75 |
| 8 | Consumer Homemaking | 7.50 |
| 9 | Personal Service | 6.00 |

Second Rating

The second rating by the panel members concerned itself with the following:

A. Methodology utilized in the units.

B. Individualization.

C. Developing a positive self-concept.

The results of this rating can be found in Table VIII, titled, "Rank Order Of The Nine Revised Units In Project AWAKE -- Methodology, Individualization, And Self-Concept."

Table VIII

Rank Order Rating Of The Nine Revised Units In Project AWAKE
---Methodology, Individualization, and Self-Concept
(10-highest --- 1-lowest)

| | | |
|---|---|---|
| (1.5) | Transportation | 9.00 |
| (1.5) | Public Service | 9.00 |
| 3 | Agri-Business/Nat. Resources | 8.75 |
| (4.5) | Business and Office | 8.00 |
| (4.5) | Health | 8.00 |
| (7) | Communications | 7.75 |
| (7) | Consumer Homemaking | 7.75 |
| (7) | Manufacturing | 7.75 |
| 9 | Personal Service | 7.00 |

Tables VII and VIII reveal that the panel of experts rated all nine revised units between 6.00 and 9.00 on a 10-point scale. This indicated to the evaluators the worthiness of each of the nine revised units as desirable units of instruction for elementary pupils.

The units, Public Service, Transportation, and Agri-Business/Natural Resources ranked highest on both ratings. It should be noted that Personal Service ranked lowest on both ratings by the panel.

STATISTICAL DATA: QUANTITATIVE ASPECTS OF PROJECT AWAKE

Quantity of Exposure of the Nine Cluster Units Within Maturity Levels

A. Number of revised cluster units developed for each maturity level:

Number possible: 9 Number revised: 9

B. Number of students who had the nine cluster units available on their maturity level: 1300

Quantity of Individualization

A. Number of variables on profile sheet:

Student sheet: 112 Teacher sheet: 124 (See Appendix F)

B. Number of teacher-pupil conferences to help individualize the student's selection and options within the unit: 775 minimum

C. Number of individual printouts for students: 775

D. Number of teachers requesting printouts: 60

E. Average number of objectives available for each student's selection per unit: 110

F. Average number of content items available for each student per unit: 270

G. Average number of instructional activities available for each student's selection per unit: 350

H. Average number of instructional resources available for each student's selection per unit: 500

I. Average number of measuring devices available for each student's selection per unit: 200

Feasibility of Existing Computer Facilities

A. Computer use: One UNIVAR 9300 32K Tape Drive and Disc Drive Combination

B. Total storage in K's: 32K

C. Storage available to project in K's: 32K (tapes)

D. Total number of available printouts retrieved concerning the nine revised cluster units: 775

It should be noted that the statistical information used in the above summary represents data accumulated since February 1, 1974. It was at this time that the first of the nine revised cluster units became available to teachers. The numerical data does not reflect the extensive use of the units prior to the availability of the units in their revised form.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

An analysis of the data presented in this report indicates that progress has been made toward all the objectives of Project AWAKE. The panel of experts rated all the nine revised cluster units as desirable modes of instruction. Results of the opinionaires and questionnaires revealed that teacher responses both by developers and users were overwhelmingly positive in nature to the project. The utilization of the computer as an aid to instruction is a desirable asset to education. Teachers felt that the program had particular strength in the variety of materials for instruction, importance of the concepts in the world of work, awareness of individual needs of pupils, the resources available for use, and methodology.

Administrators reacted favorably to the format and progress of Project AWAKE as well as the need for career education for students in their districts.

The instrument used for testing from Kindergarten through grade 4 was developed by the evaluators from the GRADE LEVEL CONCEPT QUESTIONS in Project AWAKE.

The Career Awareness Inventory test was administered to grades 5 and 6.

Results of field testing of pupils showed that the experimental group did significantly better than the control groups in all classifications of pupils; K-2, 3-4, and 5-6.

## Recommendations

The evaluators make the following recommendations:

1. Continual updating of content and activities be a major consideration. A major goal should be the inclusion of more learning activities for primary students in many of the units.
2. Involve more teachers in the experimental schools in the program--particularly teachers not involved in writing the units.
3. More attention be given to the quality of learning activities.
4. Inservice training of teachers by supervisors of the project be designed to promote more effective use of the units.
5. Extraneous materials from units be deleted on a regular basis.
6. Develop units in the six remaining cluster areas. The six units that have not been developed may be more future oriented.
7. That the project be continued, refined, and expanded to include more teachers and children.
8. Feedback information from teachers be incorporated in the continual revision of units.
9. An "idea" center or section be included in the storage area of the computer to utilize teacher suggestions that were successful--the "spin-off" for other teachers in the project.
10. Revised cluster units should be made available to teachers earlier in the school year.

GRADE LEVEL CONCEPT QUESTION, K

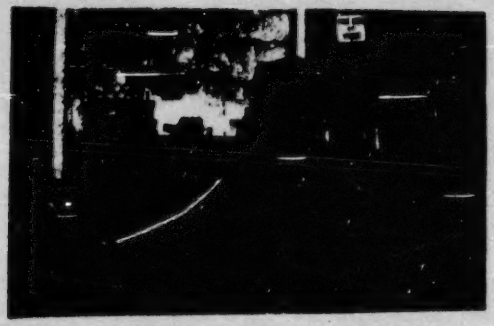
Kindergarten, What is work? (possible 5 points)

A. Instruction:

Please tell me the duties (or jobs) of each of the people shown in each of the pictures. (Pupils must indicate at least one definitive duty)

B. Scenes

1. Gas station attendant
2. Lumberjack
3. Doctor/Scientist
4. Meat cutter/Butcher
5. Delivery man/Truck driver



GRADE LEVEL CONCEPT QUESTION, K

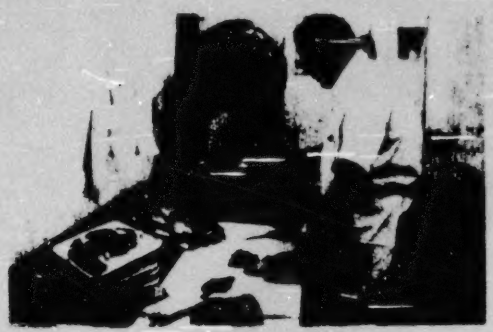
Kindergarten, What is work? (possible 6 points)

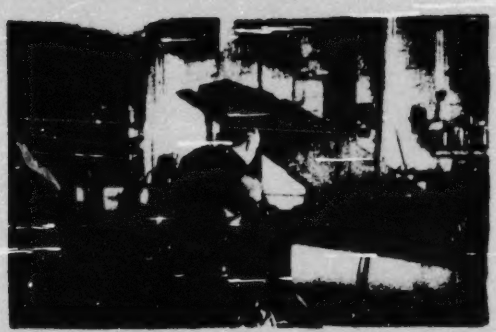
A. Instruction:

Place in a pile all the pictures that show people at work.

B. Scenes

1. Typist (W)
2. Butcher (W)
3. Mechanic (W)
4. Students at project (?) Why did you give this answer? Classification
5. Woman at coffee urn (N)





GRADE LEVEL CONCEPT QUESTION, K

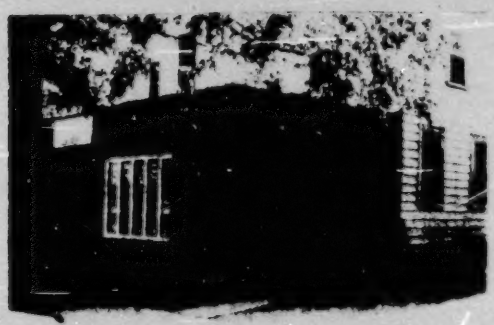
Kindergarten, What is work? (possible 6 points)

A. Instruction:

Which of the following pictures show offices or businesses that might be found in Titusville, Meadville, etc.? (depending on locale)

B. Scenes

1. Gas station (Y)
2. Fishing fleet (N)
3. Factory assembly (N) Why did you give this answer (Bonus)
4. Real estate office (Y)
5. Ice cream shop (Y)



GRADE LEVEL CONCEPT QUESTION, K

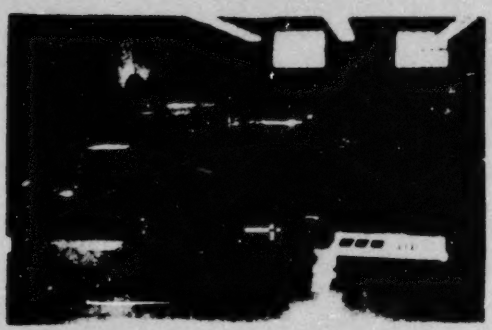
Kindergarten, What is work? (possible 6 points)

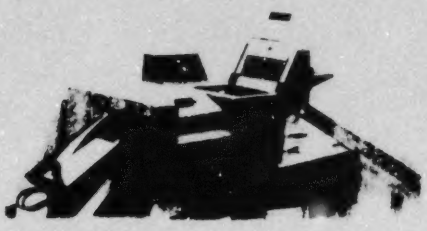
A. Instruction:

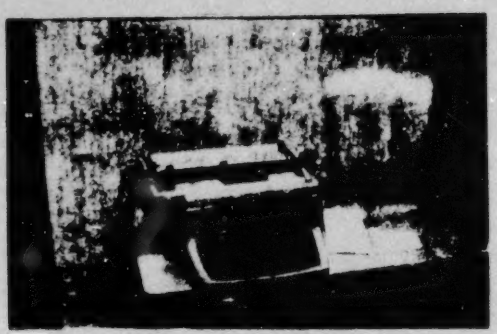
Which of the following pictures show machines and equipment that would be found in most offices?

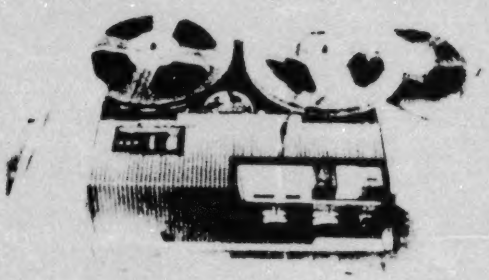
B. Scenes

1. Scale, stapler, etc. (Y) Why did you say "yes" or "no"?
2. Copier (Y)
3. Typewriter (Y)
4. Tape recorder (N)
5. Ditto machine (Y)









GRADE LEVEL CONCEPT QUESTION, GRADES 1 AND 2

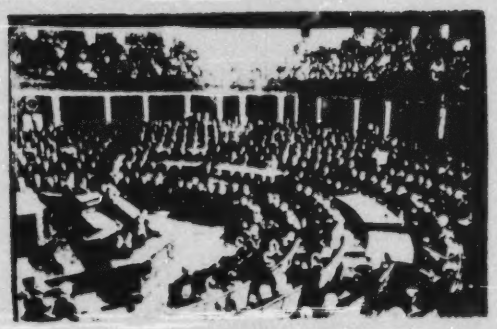
Grade 2, Who Works in these Occupations? (possible 6 points)

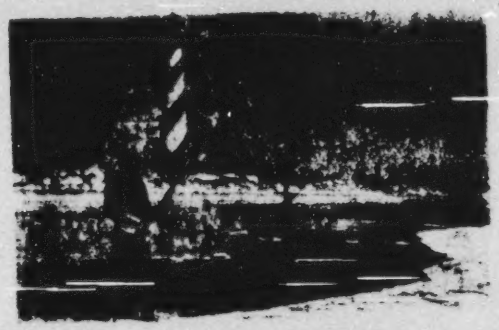
A. Instructions:

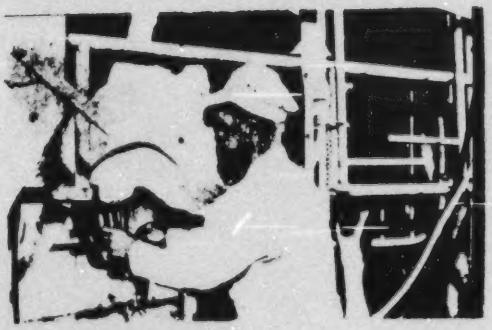
Select pictures that show people working. What type of job do these people do?

B. Scenes

1. Congress Why did you say _____? (bonus)
2. Fisherman
3. Mechanic
4. Farmer
5. Steel worker







GRADE LEVEL CONCEPT QUESTION, GRADES 1 AND 2

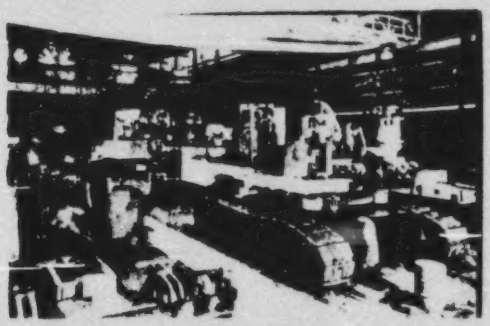
Grade 1, What are the Occupations? (possible 5 points)

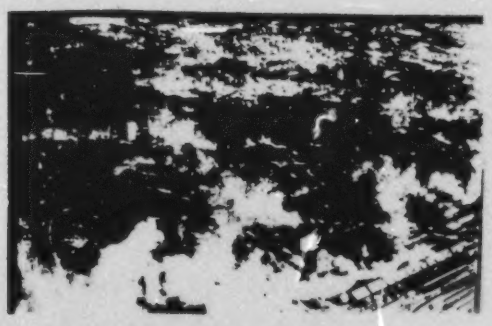
A. Instructions:

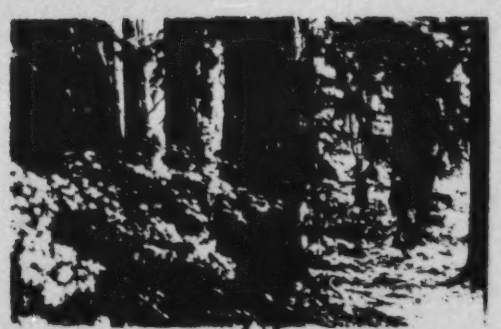
Look at each of the pictures and tell me what products are associated with each scene. What products are found in this picture?

B. Scenes

1. Cotton field
2. Tractor assembly
3. Supermarket
4. Factory --aerial
5. Forest







GRADE LEVEL CONCEPT QUESTION, GRADES 1 AND 2

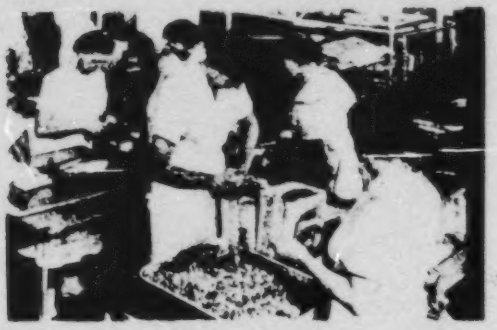
Grade 2, Who Works in these Occupations? (possible 6 points)

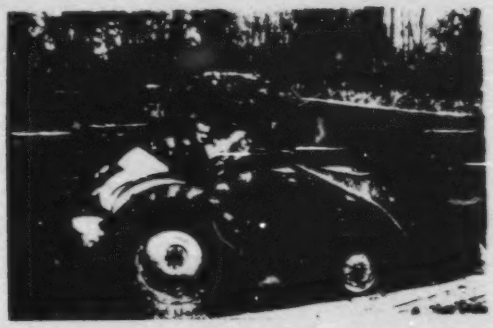
A. Instructions:

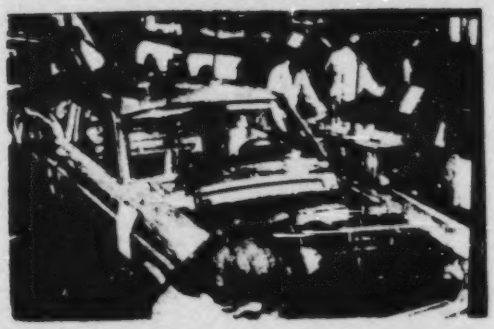
How do the people in the following scenes help us?

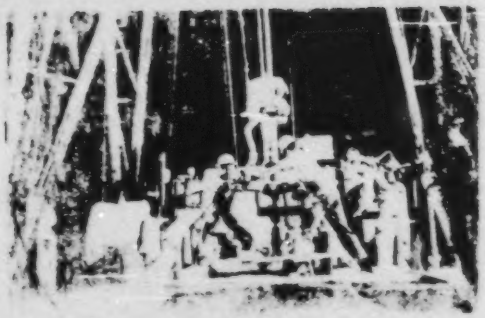
B. Scenes

1. Women preparing food
2. High-lift tractor
3. Car assembly Why did you say _____? (bonus)
4. Oil drilling rig
5. Processing fish









GRADE LEVEL CONCEPT QUESTION, GRADES 1 AND 2

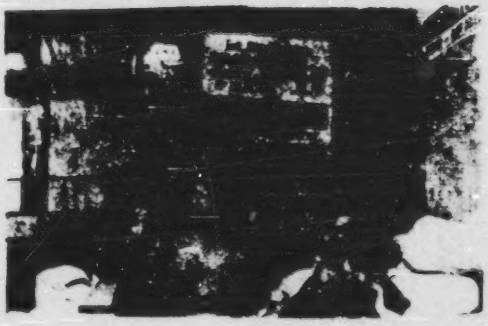
Grade 1, What are the Occupations? (possible 8 points)

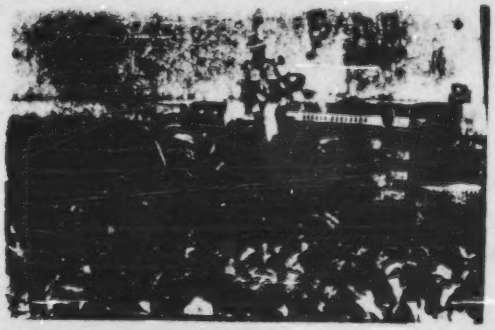
A. Instructions:

What jobs can you see in each of these pictures? (Students must identify at least one job correctly.) Ask: Which pictures show people working?

B. Scenes

1. Fishing/pleasure boats
2. Cafeteria worker
3. Laundromat
4. Cornfield
5. Steamshovel





GRADE LEVEL CONCEPT QUESTION, GRADES 3 AND 4

Grade 3, What is the life-style? (possible 6 points)

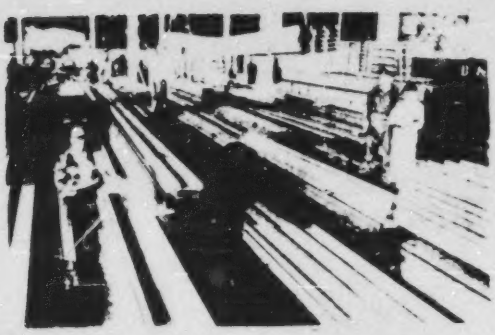
A. Instruction:

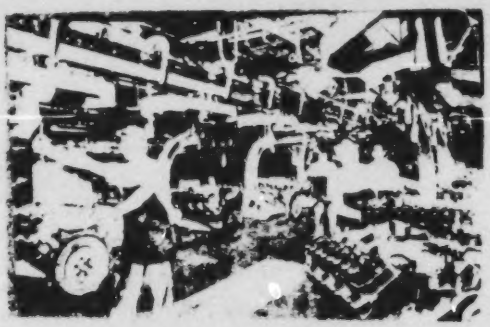
Pick out the scenes that are associated with:

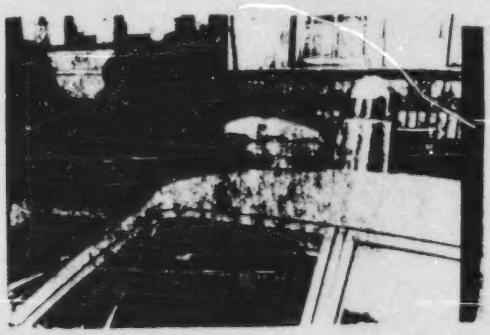
....the Health Profession
....Public Service
....Steelworking

B. Scenes

1. Steel mill
2. Engine assembly
3. Garbage collection Why did you say _____ for this one? (bonus)
4. Policemen
5. Nurse feeding child







## GRADE LEVEL CONCEPT QUESTION, GRADE 3 AND 4

Grade 3, What is the life-style? (possible 6 points)

A. Instructions:

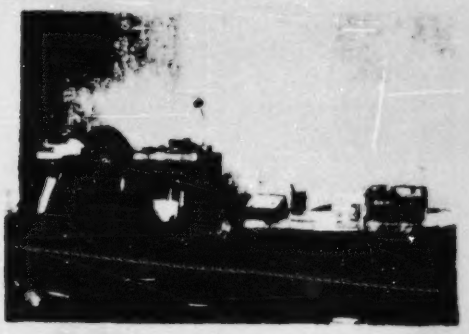
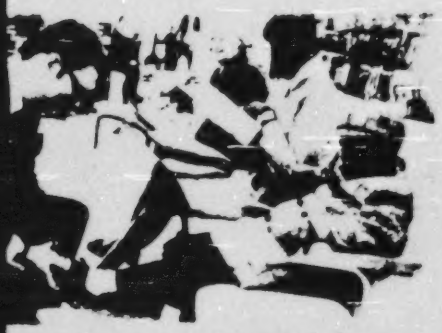
You will be shown eight pictures. Now select the picture that best shows this type of job.

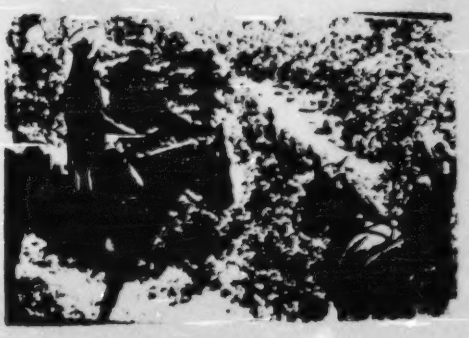
....salesman, educator, stenographer, forest ranger, actress.

Then ask, "Why did you pick this picture for an actress?" (bonus)

B. Scenes

1. Forest ranger
2. Stenographer
3. Man sitting (not working)
4. Salesman
5. Educator (man teaching)
6. Girl riding a bicycle
7. Horseback riding
8. Man reading a paper, on a break



GRADE LEVEL CONCEPT QUESTION, GRADES 3 AND 4

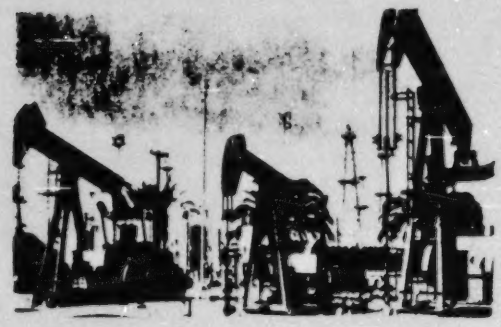
Grade 4, Whom do people work with? (possible 6 points)

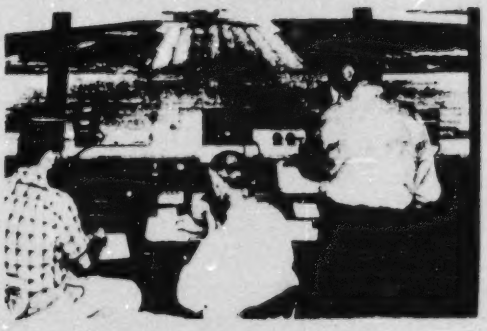
A. Instruction:

Which of the following scenes show jobs related to aviation? Then show each picture individually.

B. Scenes

? 1. Oil drilling rig. If yes, why did you say yes? (bonus)
Y 2. Pilots and stewardess
N 3. Typing class
Y 4. Control tower at airport
Y 5. Stewardess serving food on plane





GRADE LEVEL CONCEPT QUESTION, GRADES 3 AND 4

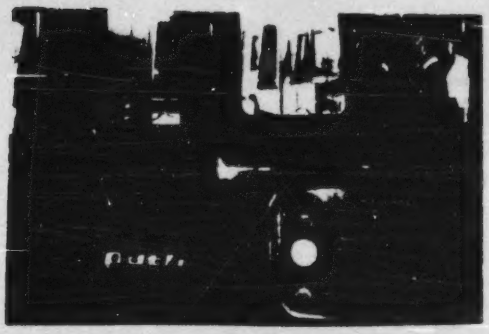
Grade 4, Whom do people work with? (possible 8 points)

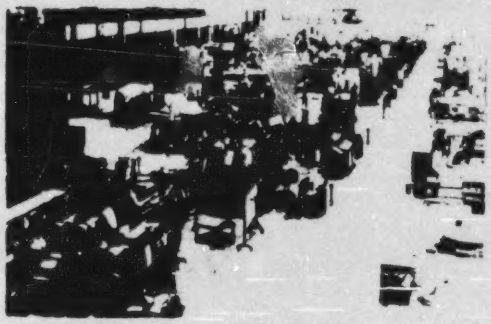
A. Instruction:

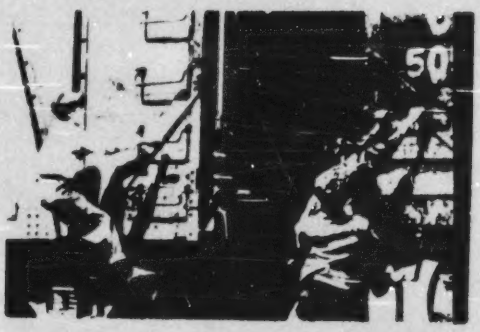
You are to look at each picture shown to you. Examine the picture and determine the method of transportation associated with it. Choose from land, sea, and air.

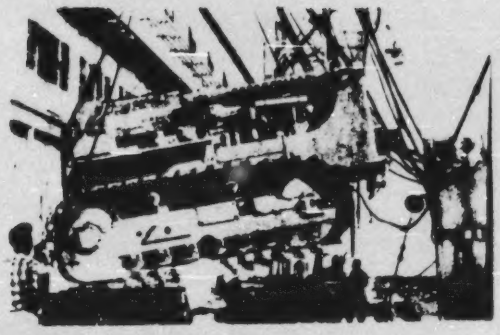
B. Scenes

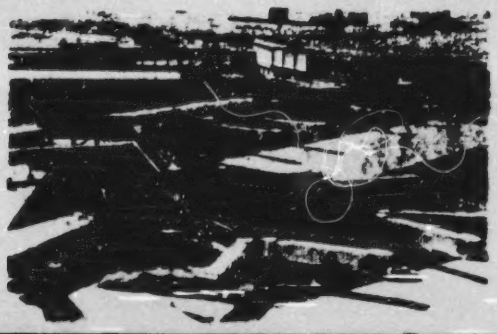
1. People getting on a subway. (L)
2. Helicopter assembly. (A)
3. Children playing on a boxcar. (L)
4. Loading caterpillar tractors on a ship. (S) How do you know?
5. Kennedy Airport Terminal. (A)
6. Which picture is used for international travel? (bonus)
7. Which picture is used in intercity travel? (bonus)
8. Which picture shows transportation used in war? (bonus)







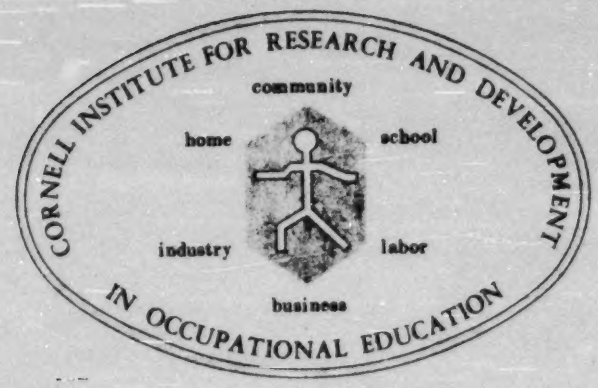


**APPENDIX B**

FEDERAL EDUCATIONAL PROJECTS CENT
752 GARDEN ST.
MEADVILLE, PA. 16335

STUDENT
BOOKLET

# CAREER AWARENESS INVENTORY




LaVerna M. Fadale

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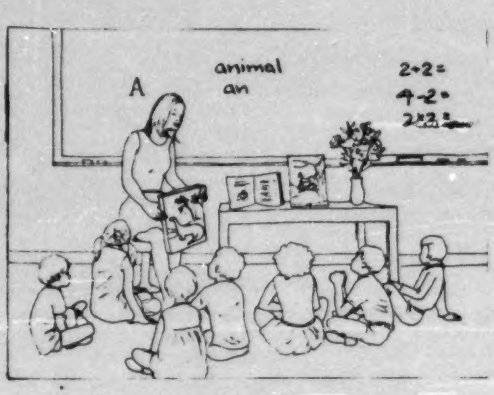
Ithaca NY 14850

DIRECTIONS: We are going to look at some pictures that show people working and doing various jobs. As we look at the picture we are going to "identify" the worker or occupation labelled with a capital letter such as "A", "B", or "C". There are 5 choices given. You are to mark the number of the answer that best identifies the worker. Let us do the sample together.

SAMPLE: Which of the following best names worker A in the sample picture?




Picture 1

1. A) artist
   B) home economist
   C) teacher
   D) nurse
   E) principal

The best answer is letter C "teacher". On your answer sheet mark within the lines letter C after the first answer.

* * * * * * * * * * * *

We look at the same picture to choose a worker that is most closely related to a teacher. There are 5 choices. You are to mark the number of the answer that is most related to the worker in the picture. Let us do the sample together.

SAMPLE: Which worker is most related to the occupation shown in picture 1?

2. A) truck driver
   B) chemist
   C) doctor
   D) principal
   E) farmer

The best answer is letter D "principal". On your answer sheet after the second answer mark within the lines letter D.

You will mark your answers in this way for each picture. Are there any questions? We begin marking at the third answer and will finish this section and stop at number 63.

Picture 2

3. Which of the following best names worker A in picture 2:

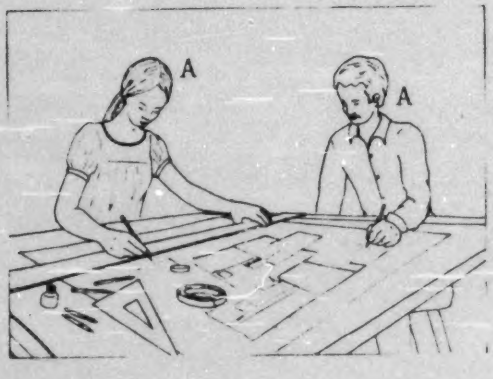
   A) policeman  D) minister
   B) lawyer  E) librarian
   C) judge

4. Which of the following best names worker B in picture 2:

   A) psychologist  D) lawyer
   B) judge  E) policeman
   C) teacher

5. Which of the following workers is most related to the occupations shown in picture 2:

   A) policeman  D) librarian
   B) teacher  E) psychologist
   C) minister



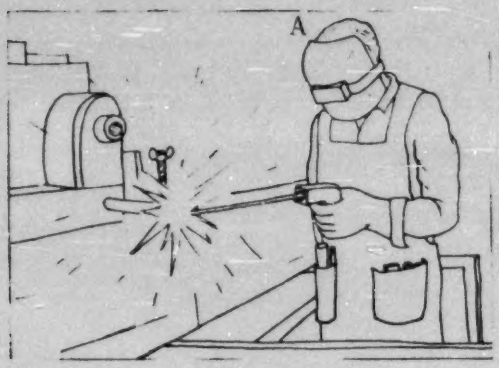

Picture 3

6. Which of the following best names worker A in picture 3:

   A) sculptor  D) teacher
   B) draftsman  E) photographer
   C) painter

7. Which of the following workers is most related to the occupation shown in picture 3:

   A) salesman  D) teacher
   B) author  E) artist
   C) judge




Picture 4

8. Which of the following best names worker A in picture 4:

A) mechanic D) grinder

B) toolmaker E) welder

C) navigator

9. Which of the following workers is most related to the occupation shown in picture 4:

A) doctor D) mechanic

B) pilot E) teacher

C) researcher

Picture 5

10. Which of the following best names worker A in picture 5:

A) cashier D) postman

B) motel clerk E) secretary

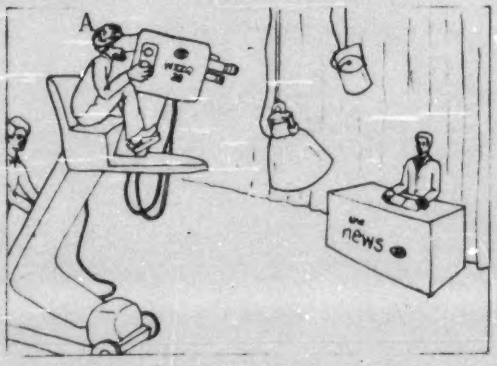
C) barber

11. Which of the following workers is most related to the occupation shown in picture 5:

A) hairdresser D) embalmer

B) usher E) travel agent

C) photographer




Picture 6

12. Which of the following best names worker A in picture 6:

A) announcer D) hostess

B) auctioneer E) usher

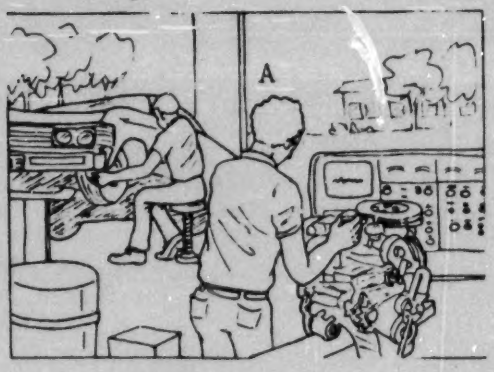
C) cameraman

13. Which of the following workers is most related to the occupations shown in picture 6:

A) typist D) launderess

B) actor E) cashier

C) messenger




Picture 7

14. Which of the following best names worker A in picture 7:

A) mechanic
B) salesman
C) toolmaker
D) typesetter
E) machinist

15. Which of the following is most related to the occupations shown in picture 7:

A) engraver
B) roofer
C) auto dealer
D) carpenter
E) fireman

Picture 8

16. Which of the following best names worker A in picture 8:

A) projectionist
B) musician
C) photoengraver
D) model
E) actor

17. Which of the following is most related to the occupation shown in picture 8:

A) tailor
B) carpenter
C) painter
D) composer
E) teacher

Picture 9

18. Which of the following best names worker A in picture 9:

A) minister
B) waiter
C) doctor
D) physical therapist
E) judge

19. Which of the following best names worker B in picture 9:

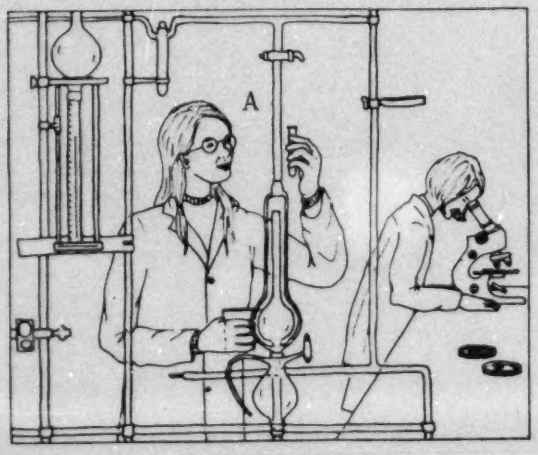
A) teacher
B) seamstress
C) doctor
D) maid
E) nurse

20. Which of the following best names worker C in picture 9:

A) physical therapist
B) guard
C) physical education teacher
D) nurse
E) psychiatrist

21. Which of the following is most related to the occupations shown in picture 9:

A) bookkeeper
B) clerk
C) auctioneer
D) pharmacist
E) waiter



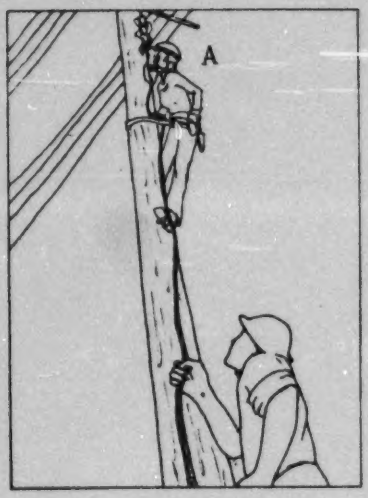

Picture 10

22. Which of the following best names worker A in picture 10:

A) scientist
B) teacher
C) clerk
D) osteopath
E) doctor

23. Which of the following is most related to the occupations shown in picture 10:

A) engineer
B) researcher
C) architect
D) librarian
E) designer




Picture 11

24. Which of the following best names worker A in picture 11:

A) carpenter
B) forest ranger
C) ecologist
D) surveyor
E) utility lineman

25. Which of the following is most related to the occupations shown in picture 11:

A) lumberman
B) dentist
C) dietitian
D) TV announcer
E) teacher

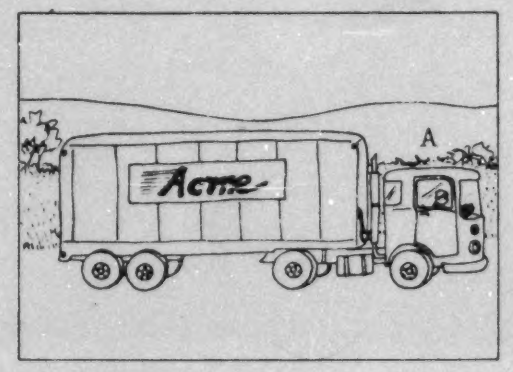
Picture 12

26. Which of the following best names worker A in picture 12:

A) secretary
B) bookkeeper
C) cashier
D) file clerk
E) typist

27. Which of the following is most related to the occupation shown in picture 12:

A) waiter
B) receptionist
C) photographer
D) manicurist
E) designer




Picture 13

28. Which of the following best names worker A in picture 13:

A) shipping clerk
B) machinist
C) truck driver
D) mechanic
E) toolmaker

29. Which of the following is most related to the occupation shown in picture 13:

A) steward
B) barber
C) usher
D) shipping clerk
E) toolmaker

Picture 14

30. Which of the following best names worker A in picture 14:

A) waitress
B) chef
C) cashier
D) steward
E) bartender

31. Which of the following best names worker B in picture 14:

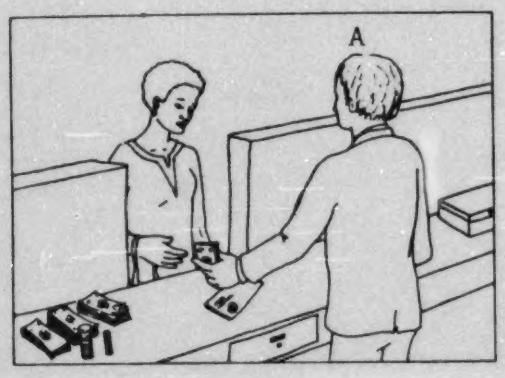
A) cashier
B) steward
C) chef
D) waiter
E) bartender

32. Which of the following best names worker C in picture 14:

A) cashier
B) chef
C) bartender
D) waitress
E) steward

33. Which of the following is most related to the occupations shown in picture 14:

A) guide
B) sheriff
C) food processor
D) conservationist
E) usher




Picture 15

34. Which of the following best names worker A in picture 15:

A) secretary
B) teller
C) accountant
D) bookkeeper
E) clerk

35. Which of the following is most related to the occupation shown in picture 15:

A) accountant
B) typist
C) librarian
D) salesman
E) steward

Picture 16

36. Which of the following best names worker A in picture 16:

A) engineer
B) postman
C) policeman
D) guide
E) fireman

37. Which of the following is most related to the occupation shown in picture 16:

A) stenographer
B) lawyer
C) author
D) principal
E) projectionist

Picture 17

38. Which of the following best names worker A in picture 17:

A) fisherman
B) sheriff
C) conservationist
D) logger
E) guard

39. Which of the following is most related to the occupation shown in picture 17:

A) pilot
B) truck driver
C) fireman
D) model
E) judge

Picture 18

40. Which of the following best names worker A in picture 18:

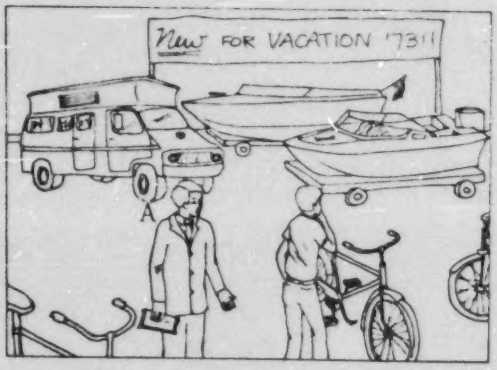
A) messenger
B) policeman
C) guard
D) mail carrier
E) fireman

41. Which of the following best names worker B in picture 18:

A) mail clerk
B) teller
C) receptionist
D) bookkeeper
E) secretary

42. Which of the following is most related to the occupations shown in picture 18:

A) waiter
B) truck driver
C) mechanic
D) auctioneer
E) barber



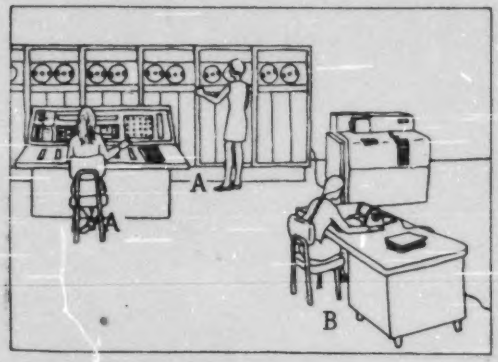

Picture 19

43. Which of the following best names worker A in picture 19:

A) clerk
B) auctioneer
C) routeman
D) draftsman
E) salesman

44. Which of the following is most related to the occupations in picture 19:

A) bookkeeper
B) machinist
C) designer
D) architect
E) steward




Picture 20

45. Which of the following best names workers A in picture 20:

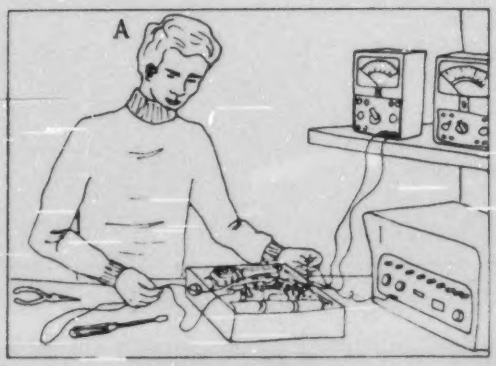
A) secretary
B) typist
C) clerk
D) computer operato
E) cashier

46. Which of the following best names worker B in picture 20:

A) secretary
B) file clerk
C) office machine worker
D) bookkeeper
E) cle...

47. Which of the following is most related to the occupations in picture 20:

A) secretary
B) designer
C) cashier
D) machinist
E) architect




Picture 21

48. Which of the following best names worker A in picture 21:

A) electronic technician
B) photoengraver
C) welder
D) riveter
E) glazier

49. Which of the following is most related to the occupation shown in picture 21:

A) welder
B) electrical engineer
C) typesetter
D) toolmaker
E) scientist

Picture 22

50. Which of the following best names worker A in picture 22:

A) mechanic
B) engineer
C) toolmaker
D) carpenter
E) machinist

51. Which of the following is most related to the occupations shown in picture 22:

A) architect
B) policeman
C) astronomer
D) machinist
E) mathematician

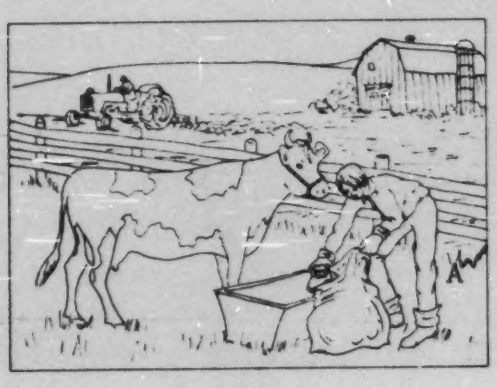
Picture 23

52. Which of the following best names worker A in picture 23:

A) painter
B) designer
C) photographer
D) draftsman
E) surveyor

53. Which of the following is most related to the occupation shown in picture 23:

A) pharmacist
B) model
C) musician
D) salesman
E) draftsman



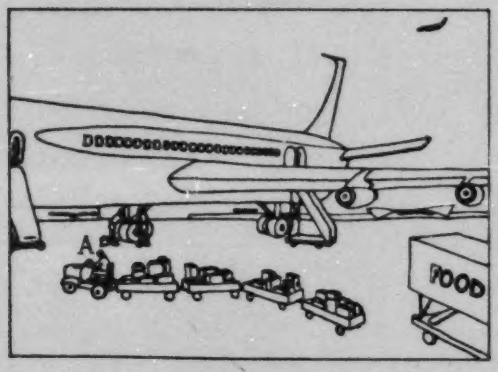

Picture 24

54. Which of the following best names worker A in picture 24:

A) economist
B) forest ranger
C) farmer
D) horticulturist
E) sociologist

55. Which of the following is most related to the occupations shown in picture 24:

A) veterinarian
B) anthropologist
C) forest ranger
D) salesman
E) engineer




Picture 25

56. Which of the following best names worker A in picture 25:

A) pilot
B) clerk
C) baggage handler
D) chef
E) truck driver

57. Which of the following is most related to the occupations shown in picture 25:

A) chef
B) stewardess
C) receptionist
D) bartender
E) cashier

Picture 26

58. Which of the following best names worker A in picture 26:

A) salesman
B) surveyor
C) ecologist
D) construction engineer
E) lift operator

59. Which of the following best names worker B in picture 26:

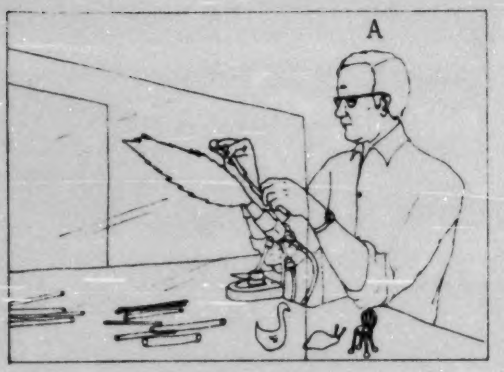
A) lift operator
B) economist
C) construction engineer
D) surveyor
E) salesman

60. Which of the following best names worker C in picture 26:

A) surveyor
B) lift operator
C) salesman
D) ecologist
E) engineer

61. Which of the following is most related to the occupations in picture 26:

A) laboratory technician
B) architect/ planner
C) lawyer
D) psychiatrist
E) economist




Picture 27

62. Which of the following best names worker A in picture 27:

A) engineer
B) model
C) artist
D) glass/ lampworker
E) draftsman

63. Which of the following is most related to the occupations shown in picture 27:

A) meteo- rologist
B) psychologist
C) geologist
D) astronaut
E) pottery-maker

STOP.

End of Test I.

DIRECTIONS: In each group of workers, there is one occupation that needs a college education. That is, in order to prepare for this job, one must attend a school that gives a degree to its graduates. Mark the letter of the worker that has to go to college. Let us look at the sample together:

SAMPLE: Which occupation needs a college education?

A) computer operator

B) teacher

C) carpenter

D) guard

E) file clerk

If you have chosen letter B, teacher, as the occupation that needs a college education you are correct. Remember you are to mark the letter of the worker that has to go to college. Are there any questions:

Begin with number 64 and respond in this way through number 69. Stop at number 69.

* * * * * * * * * * * *

64. A) motel clerk
B) carpenter
C) salesman
D) truck driver
E) doctor

65. A) chef
B) electronic technician
C) pharmacist
D) bank teller
E) glassworker

66. A) construction engineer
B) utility lineman
C) cashier
D) farmer
E) auto mechanic

67. A) secretary
B) draftsman
C) welder
D) chemist researcher
E) baggage handler

68. A) postman
B) mail clerk
C) physical therapist
D) TV cameraman
E) policeman

69. A) conservation worker
B) lawyer
C) waitress
D) photographer
E) musician

STOP.

End of Test II.

TEST III

DIRECTIONS: You may personally know workers. These workers may be members of your family. These workers may be your friends. These workers may be acquaintances. If you are familiar or know a worker, mark letter A, "am familiar". If you don't know a worker, mark letter b, "don't know". Are there any questions? Stop at number 101.

* * * * * * * * * * *

70. Motel clerk

A) am familiar

B) don't know

71. Construction engineer

A) am familiar

B) don't know

72. Carpenter

A) am familiar

B) don't know

73. Utility lineman

A) am familiar

B) don't know

74. Salesman: recreational vehicles

A) am familiar

B) don't know

75. Nurse

A) am familiar

B) don't know

76. Truck driver

A) am familiar

B) don't know

77. Cashier

A) am familiar

B) don't know

78. Auto mechanic

A) am familiar

B) don't know

79. Draftsman

A) am familiar

B) don't know

80. Chef

A) am familiar

B) don't know

81. Researcher: chemist

A) am familiar

B) don't know

82. Electronic technician

A) am familiar

B) don't know

83. Welder

A) am familiar

B) don't know

84. Bank teller

A) am familiar

B) don't know

85. Baggage handler: airline

A) am familiar

B) don't know

86. Glassworker: lampworker

A) am familiar

B) don't know

87. Postman

A) am familiar

B) don't know

88. Secretary

A) am familiar

B) don't know

89. Mail clerk

A) am familiar

B) don't know

90. TV cameraman

A) am familiar

B) don't know

91. Teacher

A) am familiar

B) don't know

92. Policeman

A) am familiar

B) don't know

93. Musician

A) am familiar

B) don't know

94. Conservation worker: forest

A) am familiar

B) don't know

95. Computer/office machine workers

A) am familiar

B) don't know

96. Lawyer/judge

A) am familiar

B) don't know

97. Doctor

A) am familiar

B) don't know

98. Waitress

A) am familiar

B) don't know

99. Farmer

A) am familiar

B) don't know

100. Photographer

A) am familiar

B) don't know

101. Physical therapist

A) am familiar

B) don't know



STOP.

End of Test III.

DIRECTIONS: When we use the word "product" we mean things that we can feel, wear or touch, for example. Some workers are basically concerned with making products. Other workers are more concerned with "doing things" or "performing a service", for example, cutting our hair. Therefore, some jobs are usually considered "service occupations". In this question there are pairs of workers. You are to mark the number of the worker in each pair that you feel is basically a product occupation, that is, they make things for people. Let us do the sample together. Which picture shows a product occupation?

SAMPLE:

102.

A. glassblower

B. lawyer

The worker, letter A, glassblower, shows a product occupation. Therefore on your answer sheets mark letter A after answer number 102. Are there any questions? Stop at number 106.

103.

A. farmer

B. nurse

104.

A. carpenter

B. cashier

105.

A. postman

B. welder

106.

A. motel clerk

B. photographer

STOP.

End of Test IV

DIRECTIONS: Sometimes different jobs are thought of by people as having a better standing or higher prestige and status than others. For example, the occupation of President of the United States can be thought of as having more prestige than the mayor of your town. High prestige jobs are those that you especially respect or admire. In this question, pairs of occupations are presented in pictures. You are to mark the letter of the worker in each pair that you feel has higher prestige or status. Are there any questions? Stop at number 111.

107.

A. Doctor

B. Secretary

108.

A. Teacher

B. Utility lineman

109.

A. Researcher: chemist

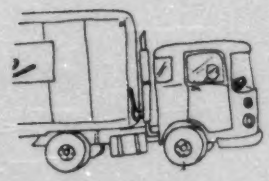
B. Waitress

110.

A. Judge

B. Conservation worker

111.



A. Truck driver

B. Construction engineer

STOP.

End of Test V

DIRECTIONS: Jobs can be thought of as being in "clusters" or grouped as to the field of the work. For each cluster, five occupations are listed. One does not belong with the cluster. Mark the letter of the occupation that does not belong. Let us do the sample together. Which of the occupations is least related to the cluster of jobs with natural resources?

SAMPLE: 112. Working with natural resources:

A) forest ranger

B) game warden

C) policeman

D) farmer

E) fisherman

If you chose letter C, policeman, as being least related you are correct. Fill in letter C after item 112. Mark your answers to items 113 through 122 in this way.

113. Transportation occupations:

A) truck driver
B) musician
C) navigator
D) dispatcher
E) airline baggage handler

114. Manufacturing occupations:

A) astronomer
B) welder
C) glassworker
D) machinist
E) cabinetmaker

115. Work that has to do with commerce, trade, and money:

A) accountant
B) bank teller
C) secretary
D) office machine worker
E) riveter

116. Construction occupations:

A) carpenter
B) fisherman
C) architect
D) plumber
E) painter

117. Public service workers:

A) judge
B) fireman
C) welder
D) mail clerk
E) policeman

118. Recreation occupations:

A) motel clerk
B) quarterback
C) tour guide
D) travel agent
E) pharmacist

119. Workers in health:

A) dentist
B) dietician
C) physical therapist
D) pathologist
E) choreographer

120. Careers in education and research:

A) historian
B) teacher
C) guidance counselor
D) pressman
E) linguist

121. Workers in communication and media:

A) lineman
B) announcer
C) therapist
D) journalist
E) publisher

122. Occupations in creative arts:

A) artist
B) author
C) musician
D) photographer
E) receptionist

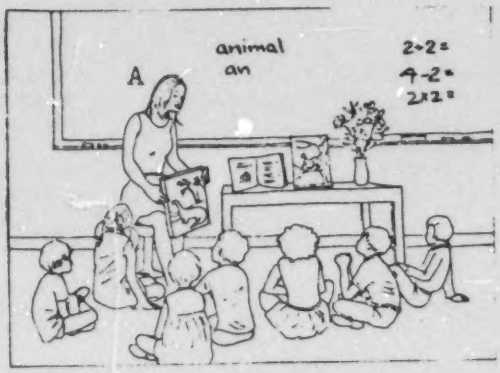


STOP.

End of Test VI.

DIRECTIONS: This activity asks you to decide what workers in certain jobs do, like to do, or have the ability to do, as well as things about the job itself. You are to mark the letter of the phrase that best completes the sentence. Let us do the sample together.

SAMPLE: Because she is a teacher the worker in picture 1 probably most likes to:

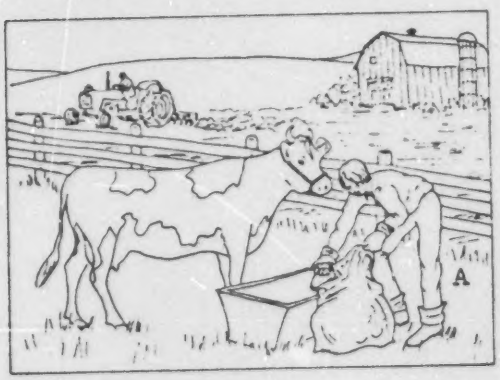



Picture 1

123. A) travel as part of her work
B) work outdoors
C) work with tools
D) work with and help other people
E) become a worker where there are many job openings

If you chose letter D), "work with and help other people", you are correct. After item 123, mark under letter D). Do numbers 124 through 130 in the same way. Are there any questions?

124. Because the workers in picture 2 are farmers, they probably most like to:




Picture 2

A) work with people
B) work outdoors
C) travel as part of their work
D) work only week-days
E) be promoted quickly

125. Because she is a secretary, the worker in picture 3 probably most likes to:

A) work a regular schedule

B) travel as part of her work

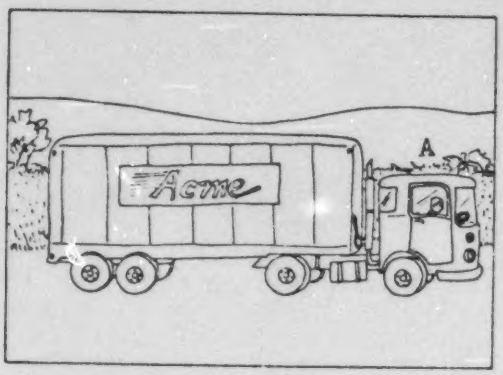
C) use her hands to create things

D) give orders

E) work outdoors

Picture 3

126. Because the worker in picture 4 is a truck driver, he probably most likes to:




A) give orders

B) work outdoors

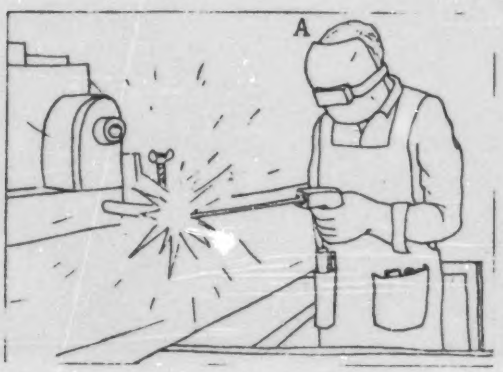
C) work with tools

D) be mobile and travel as part of his work

E) develop new things and ideas

Picture 4

127. Because the worker in picture 5 is a welder, he probably most likes to:




A) work outdoors

B) work to help people

C) work mainly with tools

D) give orders

E) travel as part of his work

Picture 5

128. Because the worker in picture 6 is a musician, he probably most likes to:

Picture 6

A) work with little competition

B) work to help people

C) work outdoors

D) be creative and express himself

E) be promoted quickly

129. Because the worker in picture 7 is a doctor, he probably most likes to:

Picture 7

A) work with and help other people

B) work a regular schedule

C) travel as part of his work

D) work outdoors

E) work with tools

130. Because the worker in picture 8 is a researcher/chemist, she probably most likes to:

Picture 8

A) work outdoors

B) travel as part of her work

C) develop and analyze new things

D) work with tools

E) give orders

STOP.

End of Test VII.

Appendix C

## PROJECT AWAKE DEVELOPER QUESTIONNAIRE

The purpose of this questionnaire is to gather information about Project AWAKE. This includes the experience which you as a teacher have gone through in developing the AWAKE Resource Unit. The following questions represent an effort to determine some feelings and opinions related to the project. Please answer these questions honestly to the fullest extent possible. It is through your answers that we will be able to constantly improve the project.

---

NAME _____

PRESENT POSITION _____ LOCATION _____

TITLE OF THE VOCATIONAL UNIT YOU HELPED DEVELOP _____

_____ DATES DURING WHICH UNIT WAS DEVELOPED _____

For each of the following statements, indicate your reaction by checking the appropriate space which most nearly reflects your feeling in each case.

SA - denotes strong agreement with the statement

A - denotes mild agreement with the statement

N - denotes neutral

D - denotes mild disagreement with the statement

SD - denotes strong disagreement with the statement

You are encouraged to elaborate in the space provided after each item (especially if your response is negative). Please attach any additional comments or suggestions.

| | SA | A | N | D | SD |
|---|---|---|---|---|---|
| 1. The topic of the unit which I helped develop was significant to me. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2. The topic of the unit I helped develop is relevant to career education. | ☐ | ☐ | ☐ | ☐ | ☐ |

| | SA | A | N | D | SD |
|---|---|---|---|---|---|
| 3. I was given sufficient information about the project (i.e., topic and format) prior to the workshop. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 4. I was given ample opportunity to define the scope and focus of the individualized unit. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 5. There was an atmosphere of mutual respect and cooperation between myself and other participants. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 6. There was an atmosphere of mutual respect and cooperation between myself, the project staff, and the consultants. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 7. There were available, most of the human and material resources I felt necessary for developing the unit. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 8. Once I had made some decision (e.g. a change in procedure obtaining resources, etc.), it was easily implemented. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 9. There was an opportunity to test ideas regarding the unit in real situations or obtain factual information concerning their worth or effectiveness. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 10. Progress was continually assessed by all active participants throughout the program. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 11. Individual differences among the participants were accepted by all. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 12. There was adequate coordination among those working on a single cluster. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 13. There was adequate coordination among the various groups working on different units. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 14. Sufficient attention was paid to group problems. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 15. Sufficient attention was paid to individual problems in the group. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 16. I felt my activities were significant and meaningful to the project. | ☐ | ☐ | ☐ | ☐ | ☐ |

| | SA | A | N | D | SD |
|---|---|---|---|---|---|
| 17. The philosophy and concepts of career education were taken into consideration in the development of the cluster resource unit. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 18. The make-up of our group was sufficiently diverse to provide an adequate cross-section of opinion and expertise. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 19. To what degree did you develop the unit around the concept of meeting individual student needs and interests? | ☐ | ☐ | ☐ | ☐ | ☐ |

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CHECKING THE YES or NO BLANK.

| | YES | NO |
|---|---|---|
| 20. As a result of your experiences in Project AWAKE do you possess different ideas, persuations, and viewpoints about education as they relate to career education? | ___ | ___ |

If so, please list some examples.

| | | |
|---|---|---|
| 21. As a result of your experiences in Project AWAKE are you more aware of problems in education as they relate to career education, specifically your own school and classroom due to your participation in the workshop? | ___ | ___ |

If so, what kind of problems?

| | | |
|---|---|---|
| 22. As a result of your experiences in Project AWAKE do you anticipate your relationship with your students will change? | ___ | ___ |

If so, please describe.

| | | |
|---|---|---|
| 23. As a result of your experiences in Project AWAKE do you anticipate your classroom procedures will change? | ___ | ___ |

If so, please describe.

| | YES | NO |
|---|---|---|
| 24. As a result of your experiences in Project AWAKE do you feel increased respect for the opinion of others regarding solutions to educational problems as they relate to career education? | ___ | ___ |

If so, describe a situation.

| | | |
|---|---|---|
| 25. As a result of your experiences in Project AWAKE are you more willing to work with others to solve instructional problems? | ___ | ___ |

If so, what type of instructional problem?

| | | |
|---|---|---|
| 26. As a result of your experiences in Project Awake, are you more able to evaluate certain educational practices of your school? | ___ | ___ |

If yes, specify practices.

| | | |
|---|---|---|
| 27. In building the AWAKE resource unit, was concern given for individual pupil growth and development patterns? | ___ | ___ |

28. Please evaluate the following list of activities as to the degree of helpfulness in developing the units. Check the appropriate space.

| | None | Some | Much | No Response |
|---|---|---|---|---|
| Group conferences . . . . . | ___ | ___ | ___ | ___ |
| Individual conferences . . . . . | ___ | ___ | ___ | ___ |
| Visitations to resources . . . . . | ___ | ___ | ___ | ___ |
| Reading professional books and teaching materials . . . . . | ___ | ___ | ___ | ___ |
| Demonstrations . . . . . | ___ | ___ | ___ | ___ |
| Examining teaching materials . . . . | ___ | ___ | ___ | ___ |
| Consultant help . . . . . | ___ | ___ | ___ | ___ |
| Other . . . . . | ___ | ___ | ___ | ___ |

PLEASE ELABORATE OR SPECIFY:

Teacher Responses To
The Project AWAKE Developer Questionnaire

Questions 1-19.

Comments

No comments.

20. As a result of your experiences in Project AWAKE, do you possess different ideas, persuasions, and viewpoints about education as they relate to career education?

Comments

I've always felt career awareness was important but actually did little about it in my classroom until I was involved in the units. It is now easier to see how to relate career education to the other areas of study.

We should try to stress the aspects of careers more.

State Police Helicopter--the training required, the different skills involved, responsibilities. Must develop attitudes and responsibilities.

I think we should spend more time working on practical lessons and stop trying to make experts out of our children.

I now see more reason to try to help students become more aware of careers.

I am more aware of individual differences.

Yes, more of it is vital to properly educate our youth for the life they, hopefully, face.

More resource people, use of career situations in subject areas.

I am strongly convinced that this program is the best form of Social Studies for the elementary school of today. The subject matter is relevant to their needs and situations.

I am much more aware that we can begin career studies earlier in a child's life, and helping him accept the idea that education is valuable in all types of professions.

Not really sure! However, I relate everyday things a little more to the idea of a future career than I did before.

Learning (academics and careers), I found out, can be very easily and meaningfully be united in the curriculum.

A greater awareness of the many attitudes and values which need to be overcome as far as "jobs" are concerned.

1. I'm more aware of the importance of career education in a well-balanced curriculum.
2. I'm more at home with the open classroom concept.
3. I use individualized instruction more in my teaching.
4. I appreciate the contributions resource people can make in the classroom.

21. As a result of your experiences in Project AWAKE, are you more aware of problems in education as they relate to career education; specifically, you own school and classroom due to your participation in the workshop?

Comments

Grading systems using letter grades could be a problem. (rating in relation to the group) (our grading system is for the individual).

Departmentalized classes could be more difficult than a self-contained room where you can be more flexible.

Staff has to feel the importance.

Classroom environment is basically a textbook type without any stress on the fact that eventually these children are going to have to work for a living.

Children feel they should learn facts rather than how to obtain them. Children should learn how to find information for everyday living.

We are not teaching children enough practical math.

Students were not very aware of careers--also, I see how little we are doing toward careers.

The concepts the children learn about careers are not followed up and reinforced in other grades.

Problems concerning individualization of instruction.

Yes--there was very little awareness being sought in the elementary schools, beyond postman, preacher, policeman, and other public services.

The big problem is availability of books.

A need for children to be exposed to different careers, so they are not forced into a certain area, but instead choose and value that choice.

The materials for activities--time to develop.

We are not preparing the average student for a life style or profession suitable for him.

1. Probably the biggest problem is the lack of library and resource materials available in my school on the subjects of career education.

2. It is sometimes difficult to persuade fellow educators and administrators toward career education.

If it weren't for the many resources and materials gathered as a group, it would take many years to be able to find such varied and interesting ideas. Also, the ideas put in each year by the teachers are those which they have tried and tested.

Parental attitudes toward the world of work is quite often negative. A desire for a college education for their children.

My facilities are worse than I thought they were. We have very little room to display projects or even carry on extra activities--it is difficult to acquire films from RIMC.

22. As a result of your experiences in Project AWAKE, do you anticipate your relationship with your students will change?

Comments

More informal--less structured approach.

Not significantly to make a big difference. Many of the things built into the units I have already been doing with the children.

The attitude of my children and the atmosphere of the entire classroom environment drastically improves when we are involved in a career unit. The children constantly want to be involved with their units and many good things have resulted.

There is a relaxed, informal attitude. This carries over to the more structured classes.

Both "Yes" and "No" are checked here. Ideally I have tried to keep a relaxed but respectful atmosphere in my classroom. The AWAKE activities will no doubt help in the relationship of student-teacher, but really this should be the rule rather than the exception.

I've gained tremendous amounts of ideas and awareness of alternatives to college.

In a way, yes. The more you consciously work with children in any way, your relationship changes.

I feel I will become more involved in individual and small group activities, and act as a coordinator to the children.

I have already become more aware of personal interests and inclinations.

I try to relate to them on a more individual basis.

Not really--however specifically we do more on career activities.

Enjoyed using computer printouts.

I'll try to emphasize career education (awareness) now.

23. As a result of your experience in Project AWAKE do you anticipate your classroom procedures will change?

Comments

I do much individualized and group work already.

About the same answers I've previously given. I will try to make them more aware of the world of work. Someday they are going to have to be working.

It has in that we do relate more now to career awareness. We've always done individual and group type activities.

I no longer teach "third grade" but a group of individuals in Room 103 (Concord-Corry).

More awareness will be infiltrated when possible.

Learning through self-motivation will become a greater force in my class and those periods where a child had to find things to keep him busy, could be used on the projects.

Not a big overall change.

As I mentioned in question twenty, I am much more at ease with the concepts of individualization and the open classroom. I will probably make an effort to try to find a permanent place for career education in my classroom curriculum.

They have since the first implementation last year.

By using the units and spending a little more time talking about careers when they appear in our newspapers, etc.

I have always tried to individualize whatever type of work we were doing as much as possible.

More individualized.

I try to allow more time for working on projects that the children are interested in personally.

24. As a result of your experience in Project AWAKE, do you feel increased respect for the opinion of others regarding solutions to educational problems as they relate to career education?

Comments

I always try to respect the opinion of others, educationally and otherwise.

Each individual has different experiences and therefore sees problems from a different light than I might, and to see the problem from many angles brings about a better solution.

Resource persons especially gave the students the desire to work.

Definitely, I realize how really unprepared we are as teachers to make the child's learning experiences relevant to future careers and we must be willing to consult others who have experiences different from ours.

Especially in the development of future curriculum and student interest.

The feeling toward non-college degree jobs are respected more by the students, and myself.

It is easier to see how important and relevant career education is to every student.

In answer to Questions Nos. 24, 25, and 26, I feel that it was a rewarding experience and a learning experience. I'm glad I I worked on the project and I hope to be able to work on it in the future again.

I see how field trips and room visitors can now be used more effectively in career education.

I am constantly asking others now of any programs or lessons they are dealing with that I might incorporate into my units.

I have always respected the opinions of others.

Due to the make-up of areas in which the various schools are located, needs vary. When we developed math problems as a result of field trips, the situations would not be applicable to others, so we had to keep more generalized.

People who have worked in factories, laborers, etc., can relate much valuable information to us.

I was very fortunate to have had the opportunity to work with six very different people during the two years I was involved with the project. Their views on education and their teaching ideas greatly benefited me and helped increase my knowledge of education.

25. As a result of your experiences in Project AWAKE, are you more willing to work with others to solve instructional problems?

Comments

It may have helped or added to the willingness but is not solely responsible.

How to individualize--obtain material.

I believe the more cooperative everybody is, the more ground there will be covered. Only if people work together will aims and goals be reached.

Planning various activities for the students to do and coordinate materials.

I'm looking forward to working with more new people with new ideas on open classroom procedures and individualized instruction. I would attempt to gain understanding on how we could be provide for the individual needs of all children as it applies to everyday life.

There is ample opportunity for team teaching--and team development of work in relation to the units.

This would be open to the occasion. All instructional problems must be dealt with. Each would need assistance.

The more people, the more ideas and the more we can encompass into the child's learning experiences. (This I felt was a weakness in the revision. There weren't enough people to get many, varied ideas).

Writing as a group seemed to bring solutions to problems of motivating slower children, and yet not boring the faster students.

I'd hope I've always been willing.

With curriculum development.

26. As a result of your experiences in Project AWAKE, are you more able to evaluate certain educational practices in your school?

Comments

The opportunity of having more freedom in the classroom. AWAKE won't work if children are forced to sit in their seats while working, and the administration must realize this.

How the child's school subjects are more relevant to his everyday experiences and his future experiences.

We tend to go along with new ideas, philosophies, and programs in this school, but many of the old or older ways are set first with more emphasis. This then seems to bog down the practice.

Types of or methods of teaching used.

In my situation I am permitted to make field trips at my convenience. I can arrange to take small groups short distances. Many teachers are not permitted this freedom.

To some degree but people are sometimes not receptive to your suggestions. We do not have a difficult time now just handling the curriculum as it is.

Expecting fourth graders to study "Social Studies" from one textbook.

I would hope that I can be of some influence in attempting to encourage each teacher in my school to use the units in an attempt to have the career education program become a continuous process from K-12 in our school system. The open classroom and individualized instruction should replace some rigid procedures.

Content of our present curriculum--are all subject areas necessary--should there be more educating students to find own answers.

Keep the students inquiring and provide resources to answer these questions.

Some practices are wasteful because they have no meaning to the students. After working on the project, it is easier to see simple concepts which need to be developed so that the child can begin to formulate ideas about himself.

Makes one question why some things are done.

I don't think the computer printout form of the career projects is getting to enough people. There should be a better way of presenting the career idea so that more people will use it.

27. In building the AWAKE resource unit, was concern given for individual pupil growth and development patterns?

Comments

Setting the program as was suggested by the staff so that those who missed any preceding competencies would be able to work with them at any time prior to the level he would be on at this time.

In AWAKE, revision of certain educational concepts were designed for each step in the educational process of the elementary child.

Sometimes I felt the program could have been more developmental to grade levels. (This was difficult to do).

28. Please evaluate the following list of activities as to the degree of helpfulness in developing the units.

Comments

No comments.

Appendix D

## PROJECT AWAKE USER QUESTIONNAIRE

NAME _____ DATE _____

PRESENT POSITION _____ LOCATION _____

WHICH OF THE UNITS DID YOU USE? _____

AT WHAT GRADE LEVEL WAS IT USED? _____ HOW MANY STUDENTS WERE INVOLVED? _____

PLEASE INDICATE THE MONTH AND YEAR IN WHICH YOU UTILIZED THE UNIT? _____

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CHECKING THE YES or NO BLANK.

You are encouraged to elaborate on your answers in the space provided.

| | YES | NO |
|---|---|---|
| 1. In your opinion was this unit oriented toward career awareness for the elementary student? | ___ | ___ |
| 2. Did you experience difficulty in obtaining the materials or measuring devices listed in the unit? | ___ | ___ |
| If yes, please explain. | | |
| 3. Were the instructional activities restricted by the physical facilities of the school (e.g., lack of individual study carrels)? | ___ | ___ |
| If yes, please specify kind of activity and restriction. | | |
| 4. Do you feel that by using this guide, you could more effectively utilize state syllabi or local courses of study? | ___ | ___ |
| If yes, how? | | |
| 5. Had you taught this topic previously without benefit of the Guide? | ___ | ___ |
| 6. If you had taught the same unit previously, did the past experience lessen your use of the Guide? | ___ | ___ |

| | YES | NO |
|---|---|---|
| 7. In your print-out for individual students, were the number of suggestions relating to content, activities, materials, and measuring devices sufficient? | ___ | ___ |
| If no, please explain. | | |
| 8. Would you consider a laboratory, demonstrating class, or other in-service training of value in helping you to learn how to implement units? | ___ | ___ |
| If other, please explain. | | |
| 9. Is the instructional staff at your school adequate for the effective utilization of the Guide? (e.g., media specialists, instructional leadership, and other teachers). | ___ | ___ |
| If no, please explain. | | |
| 10. Were you given sufficient information and guidance prior to using and during the use of the units? | ___ | ___ |
| If no, please explain. | | |
| 11. As a result of using the Guide, have you subsequently used other resources (either in or out of school) more extensively? | ___ | ___ |
| Please specify. | | |
| 12. Do you possess different ideas, persuasions, and viewpoints about education and its processes since your experience with the Guide? | ___ | ___ |
| Please explain. | | |
| 13. Are you more aware of problems in education and career education specifically in your own school and classroom as a result of using the Guide? | ___ | ___ |
| Has the use of the materials in Project AWAKE changed the teacher-pupil relationships in your classroom? | ___ | ___ |
| If yes, please explain. | | |

| | YES | NO |
|---|---|---|
| 15. Has the use of the guide influenced your classroom procedures? | ___ | ___ |
| If yes, please indicate how. | | |
| 16. Are you planning to use this unit again? | ___ | ___ |
| 17. Would you like to use other units? | ___ | ___ |
| 18. Would you like to work as part of a team in developing a unit? | ___ | ___ |
| 19. Do you feel that you have adequately been informed as to the format and methodology of Project AWAKE as it is to be used in your classroom? | ___ | ___ |

Please elaborate.

20. In your opinion what are the strong points of Project AWAKE?

21. In your opinion what areas of Project AWAKE should be altered or improved?

22. How do you think the methodology in the Project compares with methodologies of teaching techniques used in your school?

23. How do you feel the children react to the materials and methodology in the Project? Describe briefly.

Teacher Responses To
The Project Awake User Questionnaire

1. In your opinion was this unit oriented toward career awareness for the elementary student?

Comments

No comments.

2. Did you experience difficulty in obtaining the materials or measuring devices listed in the unit?

Comments

Materials listed in the unit are still difficult to obtain, but I had no lack of materials.

Some limitations of materials because our library is away from our building. (St. Philips)

Just act[illegible]ties per grade level.

Some of the activities at first printout were not listed or just not coded at all.

There is still a need for more materials in personal services especially on the primary level. Most materials were not for third graders. For this unit in particular, it was hard to find materials that they themselves could use.

Materials are not difficult to obtain if you allow sufficient time in pre-planning.

3. Were the instructional activities restricted by the physical facilities of the school?

Comments (most teachers indicated no)

Lack of space.

4. Do you feel that by using this guide, you could more effectively utilize state syllabi or local courses of study?

Comments

I feel that this material can be related to all areas of study.

They would not have to be used in place of, but in addition to the others.

Good supplemental material.

Of course when ideas are implemented in this way, more can be covered at the same time.

Any unit of this type can only be of benefit if used correctly and enlarges a child's learning experiences which is the purpose of education.

It gave many useful ideas.

This year the units were so poor that very few activities came out for the students.

There can no doubt be more effectiveness when so many other minds are involved.

Never from a test have my students learned the four factors of production as they did from following through on this unit.

The in depth varities of activities and constructions enabled the student to better understand limitations and possibilities of transportation.

6. If you had taught the same unit previously, did the past experience lessen your use of the guide?

Comments

Had more of own ideas and those obtained from other sources.

Actually I taught a lot from last year's ideas on the guide also. Also, I feel it was much easier for me to teach because I had helped to develop this unit and it was much easier to make suggestions for altering activities and making new ones.

7. In your printout for individual students, were the number of suggestions relating to content, activities, materials, and measuring devices sufficient?

Comments

We made several decoupages and mobiles not mentioned.

Some children had no activities.

Not individually, but as a class, yes.

Would have liked to have seen more activities, resources.

The most activities any student had was two and about one-third of them had none.

Some of the objectives didn't have enough activities. Also, I feel on this level, there aren't enough variety of activities.

Activities were limited, the children's ingenuity surpassed the printouts. (i.e. advertising)

Limited activities.

Some of these units are geared too highly. The teacher must improvise or adapt it to her grade level.

Some areas, expecially funeral director, had few activities. I wasn't too pleased with our rewrites in this unit. I think we would have done better to start over than to fit in what we had to new guidelines that we hadn't originally intended.

8. Would you consider a laboratory, demonstrating class, or other in-service training of value in helping you to learn how to implement units?

Comments

I helped to develop the units so I feel I am qualified to teach them.

I feel experience in using the guides the most helpful. This year's units were much smoother and more meaningful because I was not groping as much.

I'd like some new ideas on how to implement these. I think it would be a good idea.

Definitely.

9. Is the instructional staff at your school adequate for the effective utilization of the guide? (e.g. media specialists, instructional leadership, and other teachers).

Comments

We don't have media specialists.

I am working independently.

Some feel I am wrong using the units and make it difficult for me.

10. Were you given sufficient information and guidance prior to using and during the use of the units?

Comments

No comments.

11. As a result of using the Guide, have you subsequently used other resources (either in or out of school) more extensively?

Comments

Field trip, visitor.

Would use much more so - but field trips were out.

IMS

Children take individual trips into offices, stores, and visit resource people.

Resource people and places, related literature.

We now have a typewriter and cash register available for use at all times.

Find myself using the textbook less and other resources more.

Tape recordings made by individuals, interviews, and resource people.

Field trips - more use of R.I.M.C. and library.

12. Do you possess different ideas, persuasions, and viewpoints about education and its processes since your experience with the guide?

Comments

Have always felt individual activities and emphasis on the world of work was important.

Children can understand more and do more than I felt they could previously.

I feel I am more aware of how children learn.

I learned along with the children the various uses of machines and computers. I also learned more about the business operations in our area.

Many sound filmstrips, accompanied by books inspired slower readers.

More child participation, more classroom freedom.

Education and careers need to come together since they are basically the same.

Especially from the in-service training included, I realize how important career awareness is, and I feel it's an exciting and interesting area to study and teach.

13. Are you more aware of problems in education and career education specifically in your own school and classroom as a result of using the guide?

Comments

No comments.

14. Has the use of the materials in Project AWAKE changed the teacher-pupil relationships in your classroom?

Comments

There is a freedom and individual responsibility promoted by the printouts, never found in a formal class.

More give on children's part and take on teachers' part. They do more, learn more.

I know more about their abilities, their interests, etc.

Better understanding of the main goal in education.

Children seem inspired by ideas.

Made with the different groups seems to force a closer teacher-student understanding.

A more individualized approach.

Working with the different groups seems to force a closer teacher-student understanding.

Much closer situation.

Do more projects and independent work. The pupils like it.

15. Has the use of the guide influenced your classroom procedures?

Comments

This child participation carries over to the formal classes.

Somewhat as students are doing more individualized activities.

More individualization and group work.

More independent and group work is done.

To the extent that the children can now use more equipment in the classroom.

16. Are you planning to use this unit again?

Comments

No comments.

17. Would you like to use other units?

Comments

No comments.

18. Would you like to work as part of a team in developing a unit?

Comments

No comments.

19. Do you feel that you have adequately been informed as to the format and methodology of Project AWAKE as it is to be used in your classroom?

Comments

Having worked two summers with writing and coding, I can say "yes".

Individual printouts at this grade level are a problem.

I worked on writing and coding for two summers.

Yes, because it can be changed and used in many different ways, as you can see fit.

I worked on original units.

For my age level, "Kindergarten", this unit had a great many activities so that the material had interest areas for all students in my class.

20. In your opinion what are the strong points of Project AWAKE?

Comments

Child more aware of his community and what's available in the community rather than being isolated in school six hours per day.

A development of interest in new academic careers. Developing responsibility in the individual. Learning is fun.

Awareness of dignity and pride in job for manual labor.

So many interesting areas to work in. Readily adapted to group, independent, and total work.

Individualized, complete -- it's a start in the right direction for education today.

The type of instruction is different and creates a lot of interest.

Wide variety to activities and resources; also individuality.

Children becoming aware of the many opportunities in the world of work.

Children become more aware of world of work and the variety of jobs.

What the term AWAKE stands for -- a career awareness. So many youngsters are completely in the dark concerning so many occupations.

The enthusiasm of the students to use it.

Programmed learning, resource and activity suggestions, ability of students to work on their own.

Resources not normally available.

21. In your opinion what areas of Project AWAKE should be altered or improved?

Comments

In my particular unit, the activity section must be strengthened (e.g., Business).

More input from teachers involved so as to see a variety of classroom techniques, advantages, and disadvantages. Maybe a circulation of some type of bulletin of works which has been done by various teachers and their classes.

Hopefully in writing new units, we will have time to spend on activities and materials have guidelines before we begin.

Always room for improvement as far as materials are concerned.

A plan must be followed in a school district so that all units are covered in their six years of elementary school.

More varied objectives for the separate grade levels. More varied activities for some objectives.

More different activities. This unit's objectives were too much toward self awareness rather than career awareness (manufacturing)

Printouts for the elementary should be simplified.

More math, more activities.

22. How do you think the methodology in the Project compares with methodologies of teaching techniques used in your school?

Comments

Superior for language arts and social studies.

Project methodologies are more individualized.

I felt that it lent to much better teaching methods, such as individual, large, and small groups. It allows for independent work and research. It lends itself much better to this than regular school work, in which everyone is in the same book on the same subject more often.

No.

Because of its organization, it should fit in all types of classrooms.

Fits in pretty good for my classroom.

The project fits in with our method of teaching.

There is quite a bit of individual and group work being done presently so this fits in nicely.

Were not alike -- but have slowly been more and more similar.

From how I teach (now, that is) they seem to differ little.

No.

23. How do you feel the children react to the materials and methodology in the Project?

Comments

A favorable response. An opportunity for them to show themselves and get away from the rigid text-styled learning.

They enjoy it. It shows them education in a new way.

Quite well.

They enjoy having their own work to do and like to work in small groups and individually.

They have been quite excited about working with the printouts. Their name on these make it even more enticing. The work being well planned and organized for them has an encouraging reaction with each student.

They enjoy the individual attention from the use of their own "prints" and being able to pick their own activities.

Children seem to adapt very well. They like the idea of having their own particular activity to work on.

They enjoy it very much. Gives them a chance to decide what they want to do and to work on their own.

I feel they enjoy the experience of working on projects, etc., that improve their future awareness.

Yes, the children like the idea of choosing their own objectives. They like a change of pace. They work enthusiastically. They enjoy freedom within the limits.

They like this program. They like the materials but can't interpret many of the activities and objectives to know what to do without guidance. But they really like working on this program.

They enjoyed the freedom of a research followed by suggested printouts but then became frustrated when they tried to read them. These should be simplified and more step-by-step directions given.

They enjoyed every period. The weaker were led to use their gifts, while the stronger student was never limited by an exercise or page. There was always more to do and research is never ending.

Appendix E

Administrator Questionnaire
Project AWAKE
1973 - 1974

1. Do you feel that you have adequately been informed as to the format and progress of Project AWAKE as it is used in your schools? Please elaborate.

2. In your opinion what are the strong points of Project AWAKE?

3. In your opinion what areas of Project AWAKE should be altered or improved?

4. How do you think the methodology in the Project compares with methodologies or teaching techniques used in your school?

5. How do you feel the children react to the materials and methodology in the project? Describe briefly.

Administrator Responses To
The Project AWAKE User Questionnaire

1. Do you feel that you have adequately been informed as to the format and progress of Project AWAKE as it is used in your schools? Please elaborate.

Comments

Yes, we are using the program readily.

Field trips, film strips, literature, I.U. AV materials.

The coverage has been good.

Pupils have been excited and have cooperated with the program.

I am aware of the program as it is being used in our school.

No.

2. In your opinion what are the strong points of Project AWAKE?

Comments

The responsibility of completing the project rest on the pupils' shoulders. They can complete as much and as many of the projects as they desire.

Individualization.

Variety of activities from which the students are to choose.

Lists of available materials.

Subject areas more related to the world of work.

New units, printouts with objectives, content, and activities arranged more orderly.

Individual attention for child's interest.

3. In your opinion, what areas of Project AWAKE should be altered or improved?

Comments

We must localize the materials. It is difficult to secure materials from another school. The same is true if a school desires to use AV materials.

Bulkiness and confusion of printouts.

Difficulty of handling 30-35 students at one time.

More help needed for those teachers who were not involved in writing the programs.

Limited field trips.

Lack of money.

4. How do you think the methodology in the Project compares with methodologies or teaching techniques used in your school?

Comments

We use much of the methods employed in our classes.

Children are aware of what they must do.

Our system is geared to the individual student, therefore, the programs would work well together.

Favorably.

5. How do you feel the children react to the materials and methodology in the project? Describe briefly.

Comments

They like to uncover new materials and different approaches in their search to complete their work.

Most children like the program and like doing something new and different, however some children cannot work independently.

Children enjoy working as individuals, getting their own printouts, etc.

Appendix F

FORM - II

## AWAKE RESOURCE GUIDE REQUEST FORM

STUDENT'S NAME _____ UNIT TITLE _____

SCHOOL _____ TEACHER'S NAME _____

PHONE NO. _____ SUBJECT AREA _____

REQUEST DATE _____

OBJECTIVES

_____ _____ _____ _____

## LEARNER VARIABLES

GRADE LEVEL

1. K
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6
8. Above

GENERAL INTERESTS

9. Airplanes
10. Bikes
11. Camping
12. Cars/Trucks
13. Clubs
14. Colors
15. Construction (making things)
16. Dancing
17. Dramatics
18. Drawing
19. Drugs/Narcotics
20. Earth
21. Ecology
22. Electricity
23. Entertainment
24. Fables/Fairy Tales
25. Family
26. Famous People/Places
27. Farming/Gardening
28. Fashions/Grooming
29. Food/Cooking
30. Friends
31. Games/Puzzles
32. Geography
33. History
34. Hobbies
35. Horses
36. Hunting/Fishing/Trapping
37. Language
38. Magic
39. Mathematics
40. Models
41. Money
42. Music
43. Mysteries/Adventures
44. Needlecraft
45. Neighborhood
46. Painting
47. Pets
48. Photography
49. Play
50. Politics
51. Pre-historic Animals
52. Racing
53. Reading
54. Religion
55. School
56. Science
57. Scouting/4-H
58. Social Problems
59. Space
60. Sports
61. Stars/Planets
62. Television/Radio
63. Toys
64. Travel
65. Wildlife
66. Writing

TO BE COMPLETED BY TEACHERS ONLY

ACHIEVEMENT

67. Low Achiever
68. Average Achiever
69. High Achiever

READING LEVEL

70. Reading Readiness
71. Primer
72. 1.0
73. 2.0
74. 3.0
75. 4.0
76. 5.0
77. 6.0
78. 7.0
79. 8.0
80. 9.0+

MATH PLACEMENT

81. Readiness
82. Has not mastered 75% of skills on checklist in manual.
83. Mastery of 75% (or above) of skills on checklist in manual.
84. Mastery of all skills on checklist in manual and requires advanced skills.

HANDICAPS

85. Partially Sighted
86. Hard of Hearing
87. Fine Motor Disability
88. Short Term Impairment
89. Long Term Impairment
90. Educable Mentally Retarded
91. Speech Impaired
92. Visually Impaired
93. Hearing Impaired
94. Crippled and Health Impaired
95. Emotionally Disturbed
96. Socially Maladjusted
97. Remedial Reader
98. Learning Disability

SCHOOL DISTRICT

99. Conneaut
100. Corry
101. Crawford Central
102. PENNCREST
103. Titusville

INSTRUCTIONAL GOALS

104. K - What is Work?
105. 1 - What are the occupations?
106. 2 - Who works in the occupations?
107. 3 - What is the life-style?
108. 4 - Whom do people work with?
109. 5 - Where are these jobs?
110. 6 - How do workers accomplish their jobs?

REINFORCEMENT ACTIVITIES

203. Primary
204. Intermediate

AWAKE - FORM - II

TO BE COMPLETED BY TEACHER'S ONLY

STUDY AREA

111. Art
112. Home Economics
113. Industrial Arts
114. Language
115. Language Arts
116. Mathematics
117. Music
118. Science
119. Socail Studies
120. Reading
121. Interdisciplinary (self-contained classroom)
122. Special Education
123. Adaptive and Regular Physical Education
124. Health

FORM - II

# AWAKE PRE-PLANNING RESOURCE GUIDE

## TEACHER'S REQUEST FORM

TEACHER'S NAME _____ UNIT TITLE _____

SCHOOL _____ REQUEST DATE _____

PHONE NO. _____ SUBJECT AREA _____

CLASS USE DATE _____

## GENERAL CLASS OBJECTIVES

OBJECTIVES

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

## PROFESSIONAL DECISION-MAKING VARIABLES

### GRADE LEVEL

1. K
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6
8. Above

### SCHOOL DISTRICT

99. Conneaut
100. Corry
101. Crawford Central
102. PENNCREST
103. Titusville

### INSTRUCTIONAL GOALS

104. K - What is Work?
105. 1 - What are the occupations?
106. 2 - Who works in the occupations?
107. 3 - What is the life-style?
108. 4 - Whom do people work with?
109. 5 - Where are these jobs?
110. 6 - How do workers accomplish their jobs?

### STUDY AREA

111. Art
112. Home Economics
113. Industrial Arts
114. Language
115. Language Arts
116. Mathematics
117. Music
118. Science
119. Social Studies
120. Reading
121. Interdisciplinary (Self-contained Classroom)
122. Special Education
123. Adaptive and Regular Physical Education
124. Health

SUGGESTED APPROACH

125. Introductory Activity
126. Developmental Activity
127. Culminating Activity

ACTIVITIES

(Cognitive)

128. Knowledge
129. Comprehension
130. Application
131. Analysis
132. Synthesis
133. Evaluation

(Affective)

134. Receiving
135. Responding
136. Valuing
137. Organization
138. Characterization by a Value

(Psychomotor)

139. Duration
140. Frequency
141. Complexity

INSTRUCTIONAL GROUPING

142. Individual Activity
143. Small Group Activity
144. Large Group Activity

INSTRUCTIONAL ACTIVITY

145. Construction
146. Creation
147. Demonstration
148. Design
149. Discussion
150. Dramatization
151. Research/Investigation
152. Field Trip
153. Game
154. Oral Language Development
155. Collection
156. Interview
157. Experiment
158. Listening
159. List
160. Physical/Tactile/Kinesthetic
161. Problem Solving
162. Reading
163. Singing
164. Speech
165. Observation
166. Writing
167. Visit

MATERIALS

168. Art Materials
169. Felt Boards
170. Books
171. Bulletin Board Kits
172. Charts
173. Films
174. Film Strips/Film Loops
175. Puppets
176. Models
177. Instructional Toys
178. Games
179. Magazines/Newspapers
180. Maps
181. Pamphlets
182. Programmed Materials
183. Records
184. Community Resource Places
185. Slides/Photographs
186. Tapes
187. Transparencies
188. Vertical File Materials
Resource Persons
Video Tapes
Paraphernalia
192. Microgilm/Microfiche

EVALUATION DEVICES

193. Standardized Test
194. Written Examination
195. Written Report
196. Checklist
197. Rating Scale
198. Selective Observation
199. Log/Diary
200. Oral Examination
201. Oral Report
202. Creation and/or Construction

REINFORCEMENT ACTIVITIES

203. Primary
204. Intermediate